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Measuring Employment in the Environment Industry

1998 and 2000

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This paper represents the views of the author and does not necessarily reflect the opinions of Statistics Canada.

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105-07606/

Symbols

The symbols described in this document apply to all data published by Statistics Canada from all origins including surveys, censuses and administrative sources, as well as straight tabulations and all estimations.

. not available for any reference period

.. not available for a specific reference period

... not applicable

p preliminary

r revised

x suppressed to meet the confidentiality requirements of the *Statistics Act*

E use with caution

F too unreliable to be published

1. Background

The collection of firms producing environmental goods and delivering environmental services constitutes Canada's "environment industry." This industry has grown significantly in the past twenty years and stands to continue this development in the future as emerging issues such as the level of greenhouse gas emissions are addressed.

The environment industry is not a traditional industry sector and is not currently defined in the North American Classification of Industries System (NAICS). The NAICS classifies firms based on the predominant products they produce or services they offer. For example, a company producing electric pumps would be classified in the electrical products sector. If some of those pumps were used to manage pollutant outputs in a factory, part of that firm's activity could be considered to be environmentally-oriented. Therefore it might be appropriate to classify the firm as part of the environment industry. At the same time, however, the bulk of that firm's outputs is not oriented to environmental ends.

In the absence of a standard classification, the environment industry *consists of activities which produce goods and services to measure, prevent, limit, minimise or correct environmental damage to water, air and soil, as well as problems to waste, noise and eco-systems. The industry also includes cleaner technologies, products and services that reduce environmental risk and minimise pollution and resource use.*[1] Statistics Canada's **Environment Industry Survey, Business Sector (EIS),** follows the above definition in determining its survey coverage. It is a census of all establishments operating in Canada that were involved either in whole or in part in the production of environmental goods, the provision of environmental services and the undertaking of environment-related construction activities.

The EIS currently collects data on total revenues, environmental revenues, specific types of environmental activities and environmental export revenues by region. Additional information on environmental revenues by type of clients and by customer location are also collected through the survey. The integrated data are consequently used to profile the economic performance of the environment industry.

2. Objectives and scope of the project

An important aspect in the evaluation of the industry's performance is in the area of job creation and employment generation. Related to the challenges involved in classifying firms to the environment industry is the issue of identifying the employees who work in environment-related activities. Currently, the published data on employment include only the **total employment** of those businesses producing environmental goods and services, i.e., employees who worked in the production/provision of goods and services that have both environmental and non-environmental applications.

1. Organisation for Economic Co-operation and Development, 1999, *The Environmental Goods and Services Industry*, Paris.

This project aims to produce alternative measures of environmental employment by undertaking the following initiatives:

1. Addition of a sub-component employment question to the Environment Industry Survey, 2002
2. Estimate environmental employment using these approaches:
    a. Estimation of environmental employment using aggregate-level data
    b. Application of firm-level ratios of environmental revenues to total revenues to total employment data of each establishment in the survey
    c. Tabulation of the micro-level data on environmental employment for 1996, 1997 and 1998
3. Development of concordance lists which are required in order to make Input-Output modelling useful as an alternative approach to estimating environmental employment.

Measures 1 and 2 cover environmental employment estimates for the business sector, as defined in the Environment Industry Survey. The coverage for Measure 3 includes the business sector and limited research on the non-surveyed portion of the environment industry (government, non-profit organizations, institutions). This project is a preliminary but critical step in the development of information about the environment industry and its place in the Canadian economy. By beginning to refine measures of employment for the industry, the work facilitates the movement towards a more consistent and comprehensive set of employment data for multiple years, both past and future. All estimates of environmental employment in this report will be presented using tables by industry group.

3. Addition of an employment question to the Environment Industry Survey, 2002

3.1 The sub-component employment question

In the latest survey cycle, reference year 2002, the questionnaire includes a section on environmental employment (Annex A). Specifically, the survey asks the following question:

"Of the total employment reported in Box 196, Question I1, please estimate the proportion of your employees who spent any time in the production/provision of environmental goods and services, or environment-related construction services. Your best estimate is acceptable."

3.2 Question testing

The testing of the employment questions was conducted during January and February 2003. Respondents were initially contacted via email on January 14, 2003. Text box 1 presents the content of the e-mail inquiry. Telephone and fax follow-ups continued throughout February in order to obtain necessary information from non-responding firms.

The overall response rate from the question testing was 69%. All of the responding firms indicated that the first question on the definition of a standard full-time work week is consistent with the definition used by their firm. In terms of responses to the second question on the proportion of environment-related employment to total employment, the majority of responding firms stated that they are able to provide the data. However, certain respondents noted that their firm does not specifically track the number of workers that are involved in environment-related activities. In these cases, the respondents indicated that they would try to come up with a reasonable estimate. On this basis, it was decided to include the question on the Environment Industry Survey, 2002.

Text box 1. Environment Industry Survey 2002 questionnaire testing: environmental employment question

In an effort to ensure the quality and relevance of its data, Statistics Canada, routinely consults respondents in order to incorporate their input into the survey process. We are currently in the process of reevaluating the questions on total employment and environmental employment that we ask in the Environment Industry Survey. To this end, please take a few minutes to provide us with your comments.

The first question in the section on employment asks the following details related to total employment: Please report (1) the number of full-time employees - regular employees who worked 30 or more hours per week and (2) the number of part-time employees - those employees who worked less than 30 hours per week.

Does your company's definition of a **standard full-time work week** consist of 30 or more hours per week?

Yes	
No	

If no, what is your company's definition of a full-time employee?

The second question in the section asks the environment-related employment proportion of total employment: Please estimate what proportion of your employees spent any time in the production of environmental goods and services or environment-related construction services.

Please provide us your comments related to this question. Could your company easily provide the data?

Yes	
No	

If no, why not?

3.3 Data collection and processing

The questionnaire design was completed by the end of February 2003. The final version of the questionnaire and the accompanying Guide were printed at the end of March 2003. The survey was mailed on April 25, 2003. The required capture and edit system has been tested. The data collection and processing period will be carried out between May and October 2003. This phase includes all respondent follow-ups, questionnaire imaging, and data capture. Preliminary survey results will be released upon completion of the editing and imputation phase of the survey.

4. Measure 1: Estimating environmental employment using aggregate-level data

Given the absence of published environmental employment data based on direct survey results, most analysts use aggregate-level ratios in order to estimate the industry's environment-related employment. Aggregate-level ratios are computed using the data from published tables in the Environment Industry Survey report.[1] Tables 1 and 2 illustrate the calculation of environmental employment estimates using this method. In the two reference periods, 1998 and 2000, the share of environmental revenues remained virtually unchanged at the Canada level. However, the ratio of environmental revenues to total revenues at the industry group level showed more variability, hence resulting in a wider range of environmental employment estimates between 1998 and 2000.[2]

Throughout the report, this method will be used as the benchmark for comparison with other alternative approaches in estimating environmental employment.

5. Measure 2: Estimating environmental employment using firm-level ratios

One of the alternatives to aggregate-level ratios is the use of firm-level ratios. This approach aims to minimise the influence of the top contributors in the calculation of environmental-revenue-to-total-revenue ratios for each industry group. The following methodology is applied to all establishments in the EIS:

1. For each establishment, calculate the ratio of environmental revenues to total revenues.
2. Apply the respective ratios from #1 to the establishment's total employment, in order to obtain an estimate of environmental employment.
3. Use the establishment-based results from #2 to produce an aggregate table by industry group.

Tables 3 and 4 present the results of this approach for 1998 and 2000. Figures 1 and 2 show that in both 1998 and 2000, Measure 2 (firm-level approach) yielded higher environmental-revenue-to-total-revenue ratios in the majority of industry groups compared with the ratios calculated using Measure 1 (aggregate-level approach). This observation was true in 14 out of the 29 industry groups in 1998; and in 20 out of the 29 industry groups in 2000. Upon examination of the resulting total environmental employment estimates, however, Measure 2 produced a lower estimate of 90 883 environmental employees than Measure 1 (95 041) in 1998. The reverse was true in 2000, where Measure 1 showed a drop in total environmental employment (87 492) and Measure 2 presented an increase (93 981). These differences illustrate how the environmental-revenue-to-total revenue ratios of the top contributors affect the overall estimates using the two approaches. Given the more detailed data used in the firm-level approach, one might lend greater credence to the results of Measure 2.

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1. Statistics Canada, *Environment Industry Survey, Business Sector*, Catalogue no. 16F0008XIE.
2. Under this approach, the total environmental employment for Canada will not equal the sum of industry group environmental employment due to the differences in the ratio of environmental revenues to total revenues by industry group.

Figure 1. Figure 1. Shares of environmental revenues to total revenues, by industry group, 1998 Comparison between aggregate-level and firm-level approaches

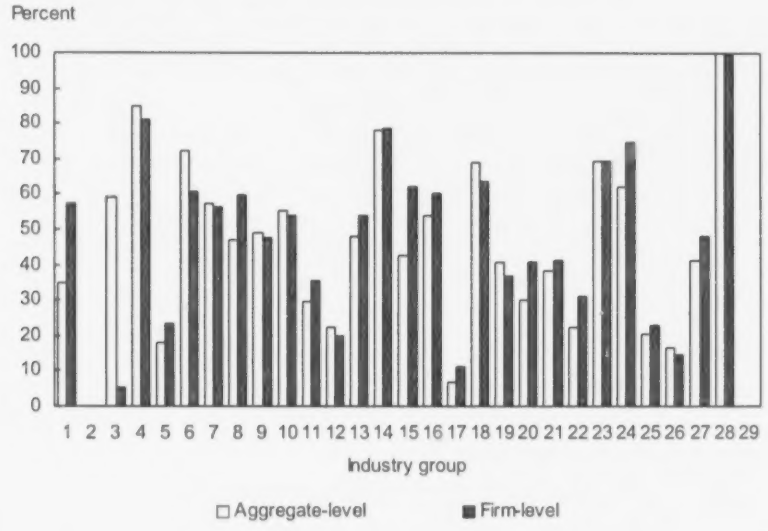
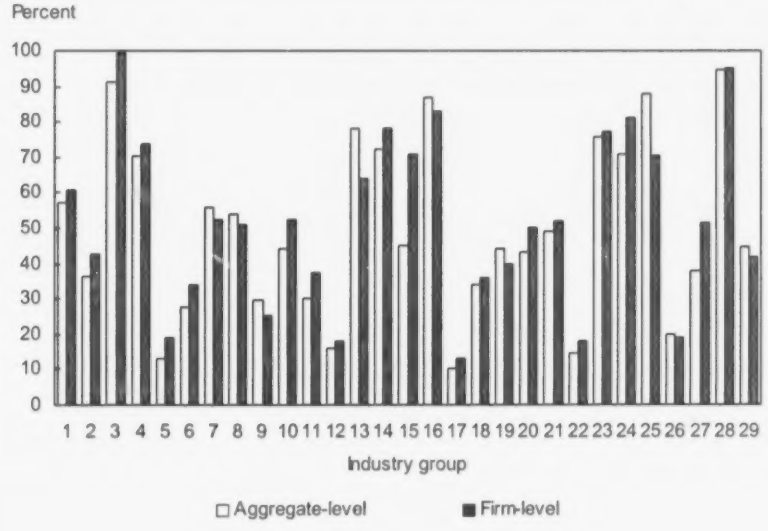


Figure 2. Shares of environmental revenues to total revenues, by industry group, 2000 Comparison between aggregate-level and firm-level approaches



Graphical comparisons of environmental employment estimates using aggregate-level ratios and firm-level ratios are shown in Figures 3 and 4. In both years, environmental employment estimates in most of the industry groups were higher using firm-level ratios in comparison with the equivalent aggregate-level ratios. Looking at the key industry groups: Waste Management and Remediation Services (28), Engineering Services (19), Recyclable Materials Wholesalers (14) and Construction Engineering (4), the two approaches yielded very similar results, with the exception of Engineering Services (19).

Figure 3. Estimates of environmental employment, by industry group, 1998 Comparison between aggregate-level and firm-level approaches

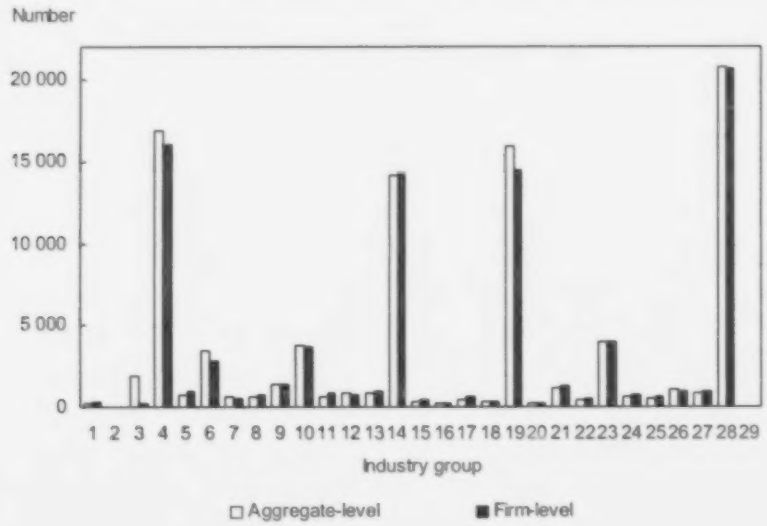
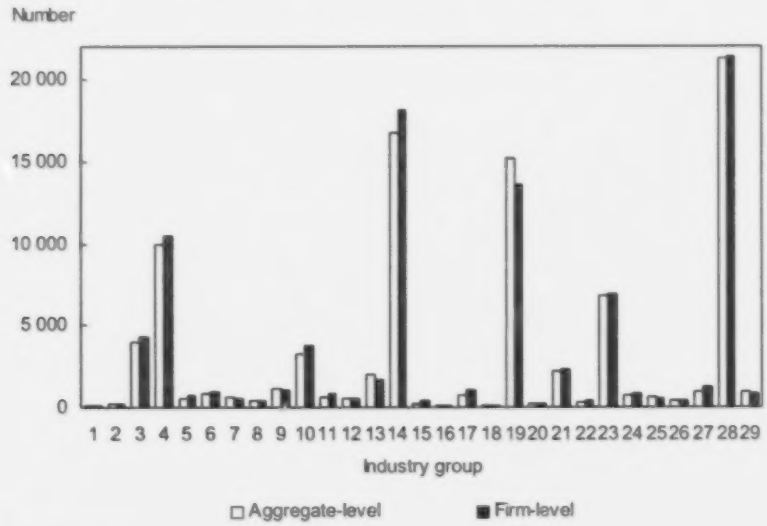


Figure 4. Estimates of environmental employment, by industry group, 2000 Comparison between aggregate-level and firm-level approaches



In the case of Engineering Services (19), the relatively lower environmental employment estimates using firm-level ratios could be attributed to the nature of this industry's workforce and the diverse projects undertaken by engineering firms. For instance, some engineering companies had less than 1 000 employees but were involved in large, multi-million dollar environmental projects. In these instances, a smaller group of highly-skilled professionals could be involved in the administration of these projects, and the rest are contracted out to smaller engineering firms. On the other hand, there were also cases of other engineering firms that reported a large number of employees such as technicians, support staff, field workers, etc. who may have been involved in smaller, short-term environment-related projects. Neither one of the two approaches could be used to describe the composition of the personnel involved in the production of environment-related goods and services.

6. Measure 3: Estimating environmental employment using past survey responses to questions on environmental employment

In the Environment Industry Survey, 1996 and 1997, a section of the survey was dedicated to questions related to total employment and environmental employment, including specific employee categories. The section was scaled down in the Environment Industry Survey, 1998 due to low response rates to the environmental employment questions (Text Box 2).

The proportion of environmental employment to total employment could also be estimated using the micro-level data for reference years 1996, 1997 and 1998. Under this approach, the data are based on actual survey results (i.e., responses to the environmental employment questions) for the three years.[1]

For data comparability, only the 745 establishments who responded consistently to the question on environmental employment in 1996, 1997 and 1998 were included in the table. In addition, the 1996 and 1997 survey results by industry group were based on the Standard Industrial Classification (SIC), therefore, establishments had to be classified to their corresponding industry groups based on the North American Industrial Classification System (NAICS) in order to produce a coherent set of estimates. Table 5 presents the environmental employment to total employment ratios by industry group. This approach produces relatively lower ratios, and therefore, lower environmental employment estimates in comparison with the first two approaches.

Further analysis was conducted by comparing the environmental revenue to total revenue ratios against the environmental employment to total employment ratios of the establishments in the sample. The rationale behind this comparison is to evaluate the hypothesis that environment-related activities are reflected in both the revenue and employment variables of firms and that the environmental revenue ratios should closely correspond to the environmental employment ratios for each industry group. Table 6 shows the average ratios by industry group for reference year 1996, 1997 and 1998. At the Canada level, there would be an 8% differential between the two methods of estimating for environmental employment. The use of average environmental employment ratios will produce higher environmental employment numbers in 16 out of the 29 industry groups. The data for the three of the top four industry groups seem to support the above hypothesis: Engineering Services (19), Recyclable Materials Wholesalers (14) and Construction Engineering (4).

Table 7 illustrates the three approaches (aggregate-level ratios, firm-level ratios and ratios based on direct survey responses) using data from the Environment Industry Survey, 1998. Industry group shares of total environment industry revenues as well as the response rates for key variables (environmental employment and environmental revenues) are also provided in Table 8 to help in the evaluation of environmental employment numbers generated by the different approaches.

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1. The analysis does not include the results from the Environment Industry Survey, 2000 because this survey did not ask any questions related to environmental employment.

Text Box 2. Survey Questions, reference years 1996 and 1997, 1998: total employment and environmental employment
Environment Industry Survey 1996 and 1997

Section E – Employment

E1. Total Employment – Please report the usual number of persons employed during the reporting period to whom you paid salaries and wages.

- Full-time employees – regular employees who worked the standard work week as observed by the business.
- Part-time employees – those who worked regularly but for fewer than the standard work week hours observed by the business
- Contract employees – engaged only for the duration of a specific project or term

E2. Environmental Employment – Please report employees who spend time on environmental activities by the following categories (do not include contract employees). Please report each employee only once, allocating each by the category most relevant to their employment duties.

- Administration (senior management, accounting, reception, clerical staff, etc.)
- Marketing and sales representatives
- Direct labour involved in manufacturing or providing services (assemblers, operators, lab technicians, field workers, etc.)
- Support personnel (shipping, receiving, stores, material handling, repair and maintenance, first-line supervision, etc.)
- Research and product/service development
- Quality assurance, quality control, customer service and warranty (including inspectors)

Environment Industry Survey, 1998

Section H – Employment

H1. Please report the total number of persons usually employed during the reporting period.

- Working proprietors and/or principals of unincorporated businesses
- Full-time employees – regular employees who worked the standard work week as observed by the business
- Part-time employees – those who worked regularly but for fewer than the standard work week hours observed by the business
- Contract employees – those who were engaged only for the duration of a specific project or term

H2. Environmental Employment – Of the total employment reported in H1, please estimate the number of employees who spent time in the production/provision of environmental goods and services, or environment-related construction services excluding contract employees.

- Total environmental employees

7. Measure 4: Estimating environmental employment using concordance list based on the Input-Output Classification

A fourth method that could be used to produce environmental employment estimates is the use of the Input-Output (I/O) tables.[1] The proposed methodology is as follows:

1. Establish a concordance between the list of environmental goods and services from the Environment Industry Survey and the list of all commodities based on the Standard Classification of Goods (SCG).[2]
2. Develop a second concordance list that matches the SCG-based list of environmental goods and services (from #1) and list of I/O commodities.
3. Using the resulting list from #2, identify the I/O industries that have environment-related activities.
4. Calculate the revenues shares of environment-related activities for each industry in #3 based on the results of the Environment Industry Survey.
5. Assuming that environmental revenue shares could be used as proxies to estimate the proportion of total employees who worked directly or indirectly in the production of environmental goods or in the provision of environmental services, apply the shares from #4 to the overall industry employment[3] in order to produce estimates of environmental employment by industry.

This limited research project estimates environmental employment for the non-surveyed portion of the environment industry[4] and to further refine and validate results from the surveyed portion. The results of this preliminary research will be used to evaluate the possibility of developing a simulation method using the I/O framework to develop a more complete profile of Canada's environment industry.

The following tables have been finalised:

- Table 9: Environmental goods and services concordance between the Environment Industry Survey (EIS) categories and the Standard Classification of Goods (SCG) codes
- Table 10: Input-Output industries with environment-related activities
- Table 11: Environment Industry Survey results and industry gross output, by Input-Output industry, 1998
- Table 12: Estimates of environmental employment using concordance list based on the Input-Output Classification (measure 4), by Input-Output Industry, 1998

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1. Greatly expanded structural detail on industries and on goods and services is portrayed in the Input-Output Tables of the System of National Accounts in Canada. Refer to *The Input-Output Structure of the Canadian Economy*, Catalogue no. 15-201-XPB.
2. The Standard Classification of Goods (SCG) is the standard for classifying goods at Statistics Canada. The SCG is based upon the international Harmonized Commodity Description and Coding System (HS), which makes up the first six digits of the SCG code.
3. Total employment by I/O industry is produced by the Micro-Economic Analysis Division, Statistics Canada.
4. Employment estimates based on the Environment Industry Survey do not include the following: government employees who work in environment-related projects, employees of environmental non-profit organizations (industry associations and environmental associations serving households).

Based on comments and recommendations from Industry Canada, additional tables by province and by establishment size were generated. The estimates for these additional tables were based on the type of Measure which Industry Canada deems to be most appropriate for producing estimates of environmental employment:

- Table 13: Estimates of environmental employment based on firm-level ratios (measure 2), by province and territory, 1998
- Table 14: Estimates of environmental employment based on firm-level ratios (measure 2), by province and territory, 2000
- Table 15: Estimates of environmental employment based on firm-level ratios (measure 2), by establishment size, Canada, 1998
- Table 16: Estimates of environmental employment based on firm-level ratios (measure 2), by establishment size, Canada, 2000

8. Next steps

This report presented tables by industry groups. The results of the Environment Industry Survey 2002 will be published in the Spring 2004. The report will include the survey response to the sub-component employment question.

In terms of the use of the Input-Output (I/O) tables in estimating environmental employment, this aspect of the project evaluated and established a concordance between the list of environmental goods and services from the Environment Industry Survey and the list of all commodities based on the Standard Classification of Goods (SCG). In addition, the project developed a second concordance list that matches the SCG-based list of environmental goods and services and list of I/O commodities and I/O industries. These lists could be used to identify the "environment-related" industries and/or commodities which would be critical to the development of an I/O model or framework specifically for the environment industry.

Table 1. Estimates of environmental employment based on aggregate-level ratios (measure 1), by industry group, Canada, 1998[1]

	Industry group[3]	Total employment	Total revenues	Total environmental revenues	Ratio of environmental revenues to total revenues[2]	Estimate of environmental employment
		number	millions of dollars			number
1	Agriculture, forestry, fishing and hunting	465	38.9	13.6	0.3	163
2	Mining and oil and gas extraction	2 009	626.4	X	X	X
3	Utilities	3 140	32.4	19.2	0.6	1 863
4	Construction	19 801	2 636.0	2 243.1	0.9	16 850
5	Chemical manufacturing	3 884	1 229.2	221.7	0.2	701
6	Plastic and rubber products manufacturing	4 715	857.8	620.1	0.7	3 408
7	Non-metallic mineral product manufacturing	1 005	180.9	103.9	0.6	578
8	Primary metal manufacturing	1 254	315.3	148.9	0.5	592
9	Fabricated metal product manufacturing	2 832	633.4	310.0	0.5	1 386
10	Machinery manufacturing	6 873	1 156.4	640.0	0.6	3 804
11	Computer and electronic product manufacturing	2 310	425.1	124.9	0.3	679
12	Electrical equipment, appliance and component manufacturing	3 906	784.7	177.1	0.2	882
13	Rest of manufacturing sector	1 763	221.3	106.8	0.5	851
14	Wholesale trade	18 142	4 083.8	3 193.6	0.8	14 188
15	Retail trade	650	131.6	56.5	0.4	279
16	Finance and insurance services	318	32.8	17.7	0.5	172
17	Legal services	5 818	732.8	51.1	0.1	406
18	Architectural and landscape architectural services	447	30.7	21.1	0.7	307
19	Engineering services	39 073	8 104.7	2 082.1	0.4	15 937
20	Surveying and mapping (including geophysical) services	560	56.4	16.9	0.3	168
21	Testing laboratories	3 129	224.9	86.2	0.4	1 199
22	Computer systems design and related services	1 713	147.9	33.3	0.2	385
23	Management, scientific and technical consulting services	5 741	476.8	331.8	0.7	3 995
24	Scientific research and development services	974	68.9	42.8	0.6	605
25	All other professional, scientific and technical services	2 626	318.2	65.1	0.2	537
26	Management of companies and enterprises	6 466	664.2	110.0	0.2	1 071
27	Administrative and support services	1 967	224.6	92.7	0.4	812
28	Waste management and remediation services	20 739	3 042.0	3 039.3	1.0	20 721
29	Other services	2 021	211.3	X	X	X
	All industry groups[4]	**164 341**	**24 689.4**	**14 278.3**	**0.6**	**95 041**

Notes:
Figures may not add up to totals due to rounding.
1. Data on total employment, total revenues and total environmental revenues were taken from Table A.1 of the report *Environment Industry Survey: Business Sector* (Catalogue no. 16F0008XIE).
2. The ratios are calculated using published data on environmental revenues and total revenues by industry group.
3. Industry groups are based on the North American Industry Classification System (NAICS).
4. The total environmental employment for Canada will not equal the sum of industry group environmental employment due to the methodology used to derive the estimates.
Source: Statistics Canada, Environment Accounts and Statistics Division.

Table 2. Estimates of environmental employment based on aggregate-level ratios (measure 1), by industry group, Canada, 2000[1]

	Industry group[3]	Total employment	Total revenues	Total environmental revenues	Ratio of environmental revenues to total revenues[2]	Estimate of environmental employment
		number	millions of dollars			number
1	Agriculture, forestry, fishing and hunting	240	14.6	8.4	0.6	138
2	Mining and oil and gas extraction	544	76.6	27.9	0.4	198
3	Utilities	4 323	32.9	30.0	0.9	3 938
4	Construction	14 160	2 179.2	1 536.4	0.7	9 983
5	Chemical manufacturing	3 629	1 676.9	222.9	0.1	482
6	Plastic and rubber products manufacturing	2 902	800.8	221.4	0.3	802
7	Non-metallic mineral product manufacturing	1 056	232.7	129.7	0.6	589
8	Primary metal manufacturing	749	144.6	77.9	0.5	404
9	Fabricated metal product manufacturing	4 011	663.9	197.9	0.3	1 196
10	Machinery manufacturing	7 231	1 339.9	593.6	0.4	3 204
11	Computer and electronic product manufacturing	2 123	354.5	106.6	0.3	638
12	Electrical equipment, appliance and component manufacturing	2 944	986.1	158.3	0.2	473
13	Rest of manufacturing sector	2 571	391.9	305.6	0.8	2 005
14	Wholesale trade	23 087	5 983.9	4 332.3	0.7	16 715
15	Retail trade	521	94.9	42.8	0.5	235
16	Finance and insurance services	100	31.4	27.2	0.9	87
17	Legal services	7 759	1 085.2	109.0	0.1	779
18	Architectural and landscape architectural services	399	25.8	8.8	0.3	136
19	Engineering services	34 205	4 415.8	1 957.1	0.4	15 160
20	Surveying and mapping (including geophysical) services	511	68.8	29.9	0.4	222
21	Testing laboratories	4 412	340.4	167.6	0.5	2 172
22	Computer systems design and related services	2 071	160.8	23.4	0.1	301
23	Management, scientific and technical consulting services	9 004	771.4	585.2	0.8	6 830
24	Scientific research and development services	1 068	76.8	54.8	0.7	759
25	All other professional, scientific and technical services	716	95.9	84.4	0.9	630
26	Management of companies and enterprises	1 957	332.1	65.4	0.2	386
27	Administrative and support services	2 386	261.5	98.5	0.4	899
28	Waste management and remediation services	22 474	3 195.7	3 020.5	0.9	21 242
29	Other services	2 116	305.5	136.5	0.4	945
	All industry groups[4]	**159 269**	**26 140.3**	**14 359.7**	**0.5**	**87 492**

Notes:
Figures may not add up to totals due to rounding.
1. Data on total employment, total revenues and total environmental revenues were taken from Table A.1 of the report *Environment Industry Survey: Business Sector* (Catalogue no. 16F0008XIE).
2. The ratios are calculated using published data on environmental revenues and total revenues by industry group.
3. Industry groups are based on the North American Industry Classification System (NAICS).
4. The total environmental employment for Canada will not equal the sum of industry group environmental employment due to the methodology used to derive the estimates.
Source: Statistics Canada, Environment Accounts and Statistics Division.

Table 3. Estimates of environmental employment based on firm-level ratios (measure 2), by industry group, Canada, 1998[1]

	Industry group[3]	Total employment	Total revenues	Total environmental revenues	Ratio of environmental revenues to total revenues	Estimate of environmental employment[2]
		number	millions of dollars			number
1	Agriculture, forestry, fishing and hunting	465	38.9	13.6	0.60	267
2	Mining and oil and gas extraction	2 009	626.4	X	X	X
3	Utilities	3 140	32.4	19.2	0.10	167
4	Construction	19 801	2 636.0	2 243.1	0.80	16 071
5	Chemical manufacturing	3 884	1 229.2	221.7	0.20	896
6	Plastic and rubber products manufacturing	4 715	857.8	620.1	0.60	2 853
7	Non-metallic mineral product manufacturing	1 005	180.9	103.9	0.60	566
8	Primary metal manufacturing	1 254	315.3	148.9	0.60	748
9	Fabricated metal product manufacturing	2 832	633.4	310.0	0.50	1 354
10	Machinery manufacturing	6 873	1 156.4	640.0	0.50	3 717
11	Computer and electronic product manufacturing	2 310	425.1	124.9	0.40	822
12	Electrical equipment, appliance and component manufacturing	3 906	784.7	177.1	0.20	776
13	Rest of manufacturing sector	1 763	221.3	106.8	0.50	946
14	Wholesale trade	18 142	4 083.8	3 193.6	0.80	14 232
15	Retail trade	650	131.6	56.5	0.60	405
16	Finance and insurance services	318	32.8	17.7	0.60	192
17	Legal services	5 818	732.8	51.1	0.10	661
18	Architectural and landscape architectural services	447	30.7	21.1	0.60	284
19	Engineering services	39 073	5 104.7	2 082.1	0.40	14 465
20	Surveying and mapping (including geophysical) services	560	56.4	16.9	0.40	228
21	Testing laboratories	3 129	224.9	86.2	0.40	1 292
22	Computer systems design and related services	1 713	147.9	33.3	0.30	529
23	Management, scientific and technical consulting services	5 741	476.8	331.8	0.70	3 991
24	Scientific research and development services	974	68.9	42.8	0.70	726
25	All other professional, scientific and technical services	2 626	318.2	65.1	0.20	600
26	Management of companies and enterprises	6 466	664.2	110.0	0.10	947
27	Administrative and support services	1 967	224.6	92.7	0.50	945
28	Waste management and remediation services	20 739	3 042.0	3 039.3	1.00	20 681
29	Other services	2 021	211.3	X	X	X
	All industry groups	**164 341**	**24 689.4**	**14 278.3**	**0.60**	**90 883**

Notes:
Figures may not add up to totals due to rounding.
1. Data on total employment, total revenues and total environmental revenues were taken from Table A.1 of the report *Environment Industry Survey: Business Sector* (Catalogue no. 16F0008XIE).
2. The estimates were calculated at the firm level (ratio of environmental revenues to total revenues applied to total employment).
3. Industry groups are based on the North American Industry Classification System (NAICS).
Source: Statistics Canada, Environment Accounts and Statistics Division.

Table 4. Estimates of environmental employment based on firm-level ratios (measure 2), by industry group, Canada, 2000[1]

	Industry group[3]	Total employment	Total revenues	Total environmental revenues	Ratio of environmental revenues to total revenues	Estimate of environmental employment[2]
		number	millions of dollars			number
1	Agriculture, forestry, fishing and hunting	240	14.6	8.4	0.60	146
2	Mining and oil and gas extraction	544	76.6	27.9	0.40	232
3	Utilities	4 323	32.9	30.0	1.00	4 309
4	Construction	14 160	2 179.2	1 536.4	0.70	10 463
5	Chemical manufacturing	3 629	1 676.9	222.9	0.20	684
6	Plastic and rubber products manufacturing	2 902	800.8	221.4	0.30	984
7	Non-metallic mineral product manufacturing	1 056	232.7	129.7	0.50	554
8	Primary metal manufacturing	749	144.6	77.9	0.50	383
9	Fabricated metal product manufacturing	4 011	663.9	197.9	0.30	1 021
10	Machinery manufacturing	7 231	1 339.9	593.6	0.50	3 794
11	Computer and electronic product manufacturing	2 123	354.5	106.6	0.40	789
12	Electrical equipment, appliance and component manufacturing	2 944	986.1	158.3	0.20	523
13	Rest of manufacturing sector	2 571	391.9	305.6	0.60	1 646
14	Wholesale trade	23 087	5 983.9	4 332.3	0.80	18 092
15	Retail trade	521	94.9	42.8	0.70	368
16	Finance and insurance services	100	31.4	27.2	0.80	83
17	Legal services	7 759	1 085.2	109.0	0.10	1 012
18	Architectural and landscape architectural services	399	25.8	8.8	0.40	143
19	Engineering services	34 205	4 415.8	1 957.1	0.40	13 663
20	Surveying and mapping (including geophysical) services	511	68.8	29.9	0.50	255
21	Testing laboratories	4 412	340.4	167.6	0.50	2 302
22	Computer systems design and related services	2 071	160.8	23.4	0.20	376
23	Management, scientific and technical consulting services	9 004	771.4	585.2	0.80	6 945
24	Scientific research and development services	1 068	76.8	54.6	0.80	865
25	All other professional, scientific and technical services	716	95.9	84.4	0.70	504
26	Management of companies and enterprises	1 957	332.1	65.4	0.20	372
27	Administrative and support services	2 386	261.5	98.5	0.50	1 226
28	Waste management and remediation services	22 474	3 195.7	3 020.5	1.00	21 366
29	Other services	2 116	305.5	136.5	0.40	881
	All industry groups	**159 269**	**26 140.3**	**14 359.7**	**0.60**	**93 981**

Notes:
Figures may not add up to totals due to rounding.
1. Data on total employment, total revenues and total environmental revenues were taken from Table A.1 of the report *Environment Industry Survey: Business Sector* (Catalogue no. 16F0008XIE).
2. The estimates were calculated at the firm level (ratio of environmental revenues to total revenues applied to total employment).
3. Industry groups are based on the North American Industry Classification System (NAICS).
Source: Statistics Canada, Environment Accounts and Statistics Division.

Table 5. Estimates of environmental employment based on direct survey response (measure 3), environmental employment to total employment ratios, by industry group, Canada, 1996 to 1998[1]

	Industry group[3]	Ratios			Sample size[2]		
		1996	1997	1998	1996	1997	1998
1	Agriculture, forestry, fishing and hunting	1.00	1.00	0.78	3	3	4
2	Mining and oil and gas extraction	0.64	0.64	X	3	3	X
3	Utilities	0.85	0.83	0.93	4	4	5
4	Construction	0.73	0.76	0.17	35	35	33
5	Chemical manufacturing	0.08	0.09	0.12	15	16	18
6	Plastic and rubber products manufacturing	0.76	0.74	0.34	14	15	15
7	Non-metallic mineral product manufacturing	0.80	0.80	0.74	6	6	6
8	Primary metal manufacturing	0.12	0.10	0.82	5	5	5
9	Fabricated metal product manufacturing	0.33	0.34	0.29	13	13	13
10	Machinery manufacturing	0.52	0.53	0.44	47	46	45
11	Computer and electronic product manufacturing	0.17	0.16	0.66	21	21	21
12	Electrical equipment, appliance and component manufacturing	1.00	1.00	0.02	1	1	2
13	Rest of manufacturing sector	0.74	0.75	0.26	14	14	14
14	Wholesale trade	0.72	0.73	0.41	90	90	88
15	Retail trade	1.00	1.00	0.71	3	3	3
16	Finance and insurance services	0.51	0.53	0.77	6	6	6
17	Legal services	0.09	0.09	0.04	9	9	8
18	Architectural and landscape architectural services	0.40	0.40	0.26	13	13	13
19	Engineering services	0.47	0.47	0.27	188	188	187
20	Surveying and mapping (including geophysical) services	0.53	0.50	0.41	11	11	12
21	Testing laboratories	0.65	0.67	0.34	44	44	43
22	Computer systems design and related services	0.39	0.42	0.28	14	13	14
23	Management, scientific and technical consulting services	0.56	0.55	0.70	115	115	114
24	Scientific research and development services	0.48	0.46	0.44	12	12	13
25	All other professional, scientific and technical services	0.08	0.09	0.25	8	8	9
26	Management of companies and enterprises	0.29	0.28	0.31	4	4	2
27	Administrative and support services	0.56	0.59	0.24	17	16	15
28	Waste management and remediation services	0.59	0.60	0.79	10	10	11
29	Other services	0.78	0.79	X	20	21	X
	All industry groups	**0.46**	**0.47**	**0.30**	**745**	**745**	**745**

Notes:
Figures may not add up to totals due to rounding.
1. Ratios are based on actual responses to survey questions on environmental employment from the Environment Industry Survey, 1996, 1997 and 1998.
2. Sample size is defined as the number of establishments in each industry group who consistently responded to the environmental employment questions in 1996, 1997 and 1998. Changes in the sample size by industry group are due to any changes in NAICS Classification of any establishment in the sample.
3. Industry groups are based on the North American Industry Classification System (NAICS).
Source: Statistics Canada, Environment Accounts and Statistics Division.

Table 6. Comparison of environmental revenue and environmental employment ratios, by industry group, Canada, 1996 to 1998[1]

	Industry group[2]	Environmental revenue	Environmental employment	Difference
1	Agriculture, forestry, fishing and hunting	0.89	0.93	0.04
2	Mining and oil and gas extraction	x	x	x
3	Utilities	0.94	0.87	-0.07
4	Construction	0.43	0.55	0.12
5	Chemical manufacturing	0.13	0.10	-0.03
6	Plastic and rubber products manufacturing	0.45	0.62	0.17
7	Non-metallic mineral product manufacturing	0.90	0.78	-0.12
8	Primary metal manufacturing	0.52	0.35	-0.17
9	Fabricated metal product manufacturing	0.23	0.32	0.08
10	Machinery manufacturing	0.59	0.49	-0.10
11	Computer and electronic product manufacturing	0.26	0.33	0.07
12	Electrical equipment, appliance and component manufacturing	0.21	0.67	0.46
13	Rest of manufacturing sector	0.42	0.58	0.17
14	Wholesale trade	0.48	0.62	0.14
15	Retail trade	1.00	0.90	-0.09
16	Finance and insurance services	0.39	0.60	0.21
17	Legal services	0.02	0.07	0.05
18	Architectural and landscape architectural services	0.29	0.35	0.06
19	Engineering services	0.28	0.40	0.12
20	Surveying and mapping (including geophysical) services	0.12	0.48	0.36
21	Testing laboratories	0.36	0.55	0.19
22	Computer systems design and related services	0.65	0.37	-0.29
23	Management, scientific and technical consulting services	0.91	0.60	-0.31
24	Scientific research and development services	0.38	0.46	0.08
25	All other professional, scientific and technical services	0.23	0.14	-0.09
26	Management of companies and enterprises	0.42	0.29	-0.13
27	Administrative and support services	0.24	0.47	0.23
28	Waste management and remediation services	0.97	0.66	-0.31
29	Other services	x	x	x
	All industry groups	**0.34**	**0.41**	**0.08**

Notes:
1. Ratios are based on actual responses to survey questions on environmental employment from the Environment Industry Survey, 1996, 1997 and 1998.
2. Industry groups are based on the North American Industry Classification System (NAICS).

Source: Statistics Canada, Environment Accounts and Statistics Division.

Table 7. Estimates of environmental employment[1]: Illustration of the three approaches using Environment Industry Survey data by industry group, 1998

	Industry group[2]	Aggregate-level	Firm-level	Direct survey response
		number		
1	Agriculture, forestry, fishing and hunting	163	267	364
2	Mining and oil and gas extraction	X	X	X
3	Utilities	1 863	167	2 907
4	Construction	16 850	16 071	3 412
5	Chemical manufacturing	701	896	459
6	Plastic and rubber products manufacturing	3 408	2 853	1 615
7	Non-metallic mineral product manufacturing	578	566	744
8	Primary metal manufacturing	592	748	1 024
9	Fabricated metal product manufacturing	1 386	1 354	831
10	Machinery manufacturing	3 804	3 717	2 997
11	Computer and electronic product manufacturing	679	822	1 536
12	Electrical equipment, appliance and component manufacturing	882	776	64
13	Rest of manufacturing sector	851	946	455
14	Wholesale trade	14 188	14 232	7 489
15	Retail trade	279	405	464
16	Finance and insurance services	172	192	244
17	Legal services	406	661	204
18	Architectural and landscape architectural services	307	284	117
19	Engineering services	15 937	14 465	10 544
20	Surveying and mapping (including geophysical) services	168	228	228
21	Testing laboratories	1 199	1 292	1 078
22	Computer systems design and related services	385	529	485
23	Management, scientific and technical consulting services	3 995	3 991	4 029
24	Scientific research and development services	605	726	431
25	All other professional, scientific and technical services	537	600	661
26	Management of companies and enterprises	1 071	947	1 994
27	Administrative and support services	812	945	480
28	Waste management and remediation services	20 721	20 681	16 319
29	Other services	X	X	X
	All industry groups	**85 041**	**90 883**	**49 968**

Notes:
1. See Tables 1 and 3 for details on aggregate-level estimates and firm-level estimates. Refer to Table 5 for ratios based on direct survey responses.
2. Industry groups are based on the North American Industry Classification System (NAICS).

Source: Statistics Canada, Environment Accounts and Statistics Division.

Table 8. Industry group shares and response rates of Environment Industry Survey data by industry group, 1998

	Industry group[2]	Industry group's share of total environment industry revenues[3]	Response rates[1]	
			Environmental employment question	Environmental revenue question
		percent		
1	Agriculture, forestry, fishing and hunting	0.1	43	67
2	Mining and oil and gas extraction	X	40	72
3	Utilities	0.1	47	88
4	Construction	15.7	55	72
5	Chemical manufacturing	1.6	71	85
6	Plastic and rubber products manufacturing	4.3	55	67
7	Non-metallic mineral product manufacturing	0.7	57	93
8	Primary metal manufacturing	1.0	12	92
9	Fabricated metal product manufacturing	2.2	40	83
10	Machinery manufacturing	4.5	44	67
11	Computer and electronic product manufacturing	0.9	46	63
12	Electrical equipment, appliance and component manufacturing	1.2	23	46
13	Rest of manufacturing sector	0.7	37	69
14	Wholesale trade	22.4	51	76
15	Retail trade	0.4	87	93
16	Finance and insurance services	0.1	37	53
17	Legal services	0.4	37	55
18	Architectural and landscape architectural services	0.1	53	84
19	Engineering services	14.6	53	73
20	Surveying and mapping (including geophysical) services	0.1	52	76
21	Testing laboratories	0.6	61	79
22	Computer systems design and related services	0.2	52	88
23	Management, scientific and technical consulting services	2.3	57	82
24	Scientific research and development services	0.3	48	82
25	All other professional, scientific and technical services	0.5	50	71
26	Management of companies and enterprises	0.8	32	68
27	Administrative and support services	0.6	55	79
28	Waste management and remediation services	21.3	57	79
29	Other services	X	55	76
	All industry groups	**100.0**	**52**	**75**

Notes:
1. Based on response rates according to the number of reporting establishments.
2. Industry groups are based on the North American Industry Classification System (NAICS).
3. Based on Table A.1 of the survey report, *Environment Industry Survey: Business Sector, 1998* (Catalogue no. 16F0008XIE).

Source: Statistics Canada, Environment Accounts and Statistics Division.

Table 9. Environmental goods and services concordance between the Environment Industry Survey (EIS) categories and the Standard Classification of Goods (SCG) codes

SCG codes[1]	EIS categories[2]
8548.1	batteries
8601	batteries
8703.90.10	batteries
8421.39.20	catalytic converter
8421.29.91	clarifier
8429.4	compactor
8509.3	compactor
6305.32	containment systems
6305.33	containment systems
7311	containment systems
7611	containment systems
7612.1	containment systems
7613	containment systems
3923.10.59	containment systems
3923.50.90	containment systems
4415.10.60	containment systems
4819.50.90	containment systems
7010.91.99	containment systems
7310.10.90	containment systems
7310.29.1	containment systems
7612.90.90	containment systems
8506.90.10	containment systems
8606.99.23	containment systems
8609.00.11	containment systems
8609.00.19	containment systems
8609.00.90	containment systems
8901.90.20	containment systems
8906.00.19	containment systems
8421.29.91	sewage disposal
8421.39.9	dust collectors
2505.9	filter
4805.4	filter
4812	filter
4823.2	filter
8421.99	filter
9002.2	filter
8421.29.10	filter
8421.29.91	filter
8421.29.92	filter
8421.29.99	filter
8421.39.20	filter
8421.39.9	filter
8509.3	garbage
7323.93.90	garbage
8707.90.9	garbage
8402.19.90	generators
7308.90.25	highway barriers
8417.8	incinerator
8417.9	incinerator
8413.2	measuring equipment
9017.9	measuring equipment
9026.9	measuring equipment
9027.8	measuring equipment
9028.2	measuring equipment
9030.1	measuring equipment
9030.3	measuring equipment
9030.82	measuring equipment
9030.83	measuring equipment
9030.9	measuring equipment
9031.8	measuring equipment
9031.9	measuring equipment
8413.91.92	measuring equipment
8526.10.90	measuring equipment
9017.80.19	measuring equipment
9026.10.10	measuring equipment
9026.10.9	measuring equipment
9026.20.10	measuring equipment

Table 9. Environmental goods and services concordance between the Environment Industry Survey (EIS) categories and the Standard Classification of Goods (SCG) codes (continued)

SCG codes[1]	EIS categories[2]
9026.20.90	measuring equipment
9030.40.90	measuring equipment
9030.89.90	measuring equipment
3821	filter media
6305.32	filter media
6305.33	filter media
3824.90.99.9	filter media
8714.19	mufflers
8708.92.10	mufflers
8708.92.91	mufflers
3917.22	pipes
3917.31	pipes
3917.33	pipes
3917.39	pipes
4009.2	pipes
4009.3	pipes
4009.4	pipes
4416	pipes
7304.1	pipes
7304.21	pipes
7304.3	pipes
7304.4	pipes
7304.5	pipes
7304.9	pipes
7305.1	pipes
7305.3	pipes
7306.1	pipes
7306.3	pipes
7306.4	pipes
7306.5	pipes
7306.5	pipes
7306.6	pipes
7411.1	pipes
7411.21	pipes
7411.22	pipes
7411.29	pipes
7507.11	pipes
7507.12	pipes
7608.1	pipes
7608.2	pipes
7906	pipes
8006	pipes
3917.21.10	pipes
3917.21.20	pipes
3917.21.30	pipes
3917.21.40	pipes
3917.21.90	pipes
3917.23.10	pipes
3917.23.20	pipes
3917.23.30	pipes
3917.23.40	pipes
3917.23.90	pipes
3917.29.11	pipes
3917.29.12	pipes
3917.29.13	pipes
3917.29.19	pipes
3917.29.20	pipes
3917.29.30	pipes
3917.29.40	pipes
3917.29.91	pipes
3917.29.92	pipes
3917.29.99	pipes
4009.10.90	pipes
4009.50.1	pipes
4009.50.20	pipes
4009.50.9	pipes
6810.99.71	pipes
6811.30.10	pipes

Table 9. Environmental goods and services concordance between the Environment Industry Survey (EIS) categories and the Standard Classification of Goods (SCG) codes (continued)

SCG codes[1]	EIS categories[2]
6811.30.20	pipes
6906.00.90	pipes
7110.19.90	pipes
7303.00.20	pipes
7303.00.30	pipes
7303.00.90	pipes
7305.90.00.1	pipes
7305.90.00.9	pipes
7306.90.11	pipes
7306.90.21	pipes
7306.90.29	pipes
7326.90.90	pipes
7805.00.10	pipes
8708.92.10	pipes
8421.39.9	precipitator
8414.1	pumps
8413.81.10	pumps
8413.81.99	pumps
8413.91.4	pumps
3824.90.4	purification equipment
8421.29.91	purification equipment
8421.29.92	purification equipment
8421.29.99	purification equipment
8421.39.20	purification equipment
8421.39.9	purification equipment
3926.90.9	recovery equipment
8412.90.10	recovery equipment
8412.90.20	recovery equipment
8419.39	recycling
8465.96	recycling
8477.20.20	recycling
8477.80.92	recycling
8474.1	scrubbers
8421.39.9	scrubbers
8421.1	separators
8421.91	separators
8421.39.9	separators
8708.92.10	silencers
8708.92.91	silencers
8541.4	solar, photovoltaic cells
5603	spill equipment
3926.90.9	spill equipment
6307.90.9	spill equipment
8439.1	strainers
8406.1	turbines
8406.81	turbines
8406.82	turbines
8406.9	turbines
8410.1	turbines
8410.9	turbines
8411.8	turbines
8411.99	turbines
8412.8	turbines
8412.90.90	turbines
8413.81.99	turbines
8703.90.90	turbines
8481.1	valves
8481.2	valves
8481.2	valves
8481.3	valves
8481.4	valves
8540.81	valves
8540.89	valves
8540.9	valves
3922.90.20	valves
8481.80.01	valves
8481.80.04	valves
8481.80.05	valves

Table 9. Environmental goods and services concordance between the Environment Industry Survey (EIS) categories and the Standard Classification of Goods (SCG) codes (continued)

SCG codes[1]	EIS categories[2]
8481.80.09	valves
8481.80.1	valves
8481.80.2	valves
8481.80.3	valves
8481.80.4	valves
8481.80.5	valves
8481.80.6	valves
8481.80.7	valves
8481.80.89	valves
8481.80.91	valves
8481.80.92	valves
8481.80.93	valves
8481.80.94	valves
8481.80.95	valves
8481.80.99	valves
9032.89.50	valves
9033.00.20	valves
9033.00.30	valves
9033.00.40	valves
9033.00.90	valves
9031.8	vibration measuring or detecting instruments
8421.21	water treatment
3824.90.4	water treatment
8412.8	windmill
8412.90.90	windmill

Notes:
1. SCG codes refer to the Standard Classification of Goods codes which are based upon the international Harmonized Commodity Description and Coding System (HS). The first six digits of the SCG code match the HS code for a specific commodity.
2. EIS categories pertain to the environmental goods and services covered in the *Environment Industry Survey: Business Sector* (Catalogue no. 16F0008XIE).
Source: Statistics Canada, Environment Accounts and Statistics Division.

Table 10. Input-Output industries with environment-related activities

Input-Output industry	North American Industry Classification System (NAICS) code	North American Industry Classification System (NAICS) description	Input-Output description
1	111422	Floriculture Production	Greenhouse, Nursery and Floriculture Production
3	112510	Animal Aquaculture	Animal Aquaculture
7	115110	Support Activities for Crop Production	Support Activities for Crop Production
9	115310	Support Activities for Forestry	Support Activities for Forestry
10	211113	Conventional Oil and Gas Extraction	Oil and Gas extraction
10	211114	Non-Conventional Oil Extraction	Oil and Gas extraction
13	212220	Gold and Silver Ore Mining	Gold and Silver Ore Mining
14	212232	Nickel-Copper Ore Mining	Copper, Nickel, Lead and Zinc Ore Mining
15	212291	Uranium Ore Mining	Other Metal Ore Mining
16	212315	Limestone Mining and Quarrying	Stone Mining and Quarrying
17	212326	Shale, Clay and Refractory Mineral Mining and Quarrying	Sand, Gravel, Clay, and Ceramic and Refractory Mining and Quarrying
22	212397	Peat Extraction	Miscellaneous Non-Metallic Mineral Mining and Quarrying
23	213111	Oil and Gas Contract Drilling	Support Activities for Mining and Oil and Gas Extraction
23	213117	Contract Drilling (except Oil and Gas)	Support Activities for Mining and Oil and Gas Extraction
23	213118	Services to Oil and Gas Extraction	Support Activities for Mining and Oil and Gas Extraction
23	213119	Other Support Activities for Mining	Support Activities for Mining and Oil and Gas Extraction
24	221111	Hydro-Electric Power Generation	Electric Power Generation, Transmission and Distribution
24	221119	Other Electric Power Generation	Electric Power Generation, Transmission and Distribution
25	221210	Natural Gas Distribution	Natural Gas Distribution
26	221310	Water Supply and Irrigation Systems	Water, Sewage and Other Systems
26	221320	Sewage Treatment Facilities	Water, Sewage and Other Systems
26	221330	Steam and Air-Conditioning Supply	Water, Sewage and Other Systems
27	231210	Residential Building Construction	Residential Building Construction
27	231220	Non-Residential Building Construction	Residential Building Construction
27	231310	Highway, Street and Bridge Construction	Residential Building Construction
27	231320	Water and Sewer Construction	Residential Building Construction
27	231330	Oil and Gas Pipelines and Related Industrial Complexes Construction	Residential Building Construction
27	231390	Other Engineering Construction	Residential Building Construction
27	231410	Construction Management	Residential Building Construction
27	232110	Site Preparation Work	Residential Building Construction
27	232220	Concrete Pouring and Finishing Work	Residential Building Construction
27	232440	Insulation Work	Residential Building Construction
27	232510	Electrical Work	Residential Building Construction
27	232520	Plumbing, Heating and Air-Conditioning Installation	Residential Building Construction
27	232530	Automatic Sprinkler System Installation	Residential Building Construction
27	232540	Commercial Refrigeration Installation	Residential Building Construction
27	232590	Other Building Equipment Installation	Residential Building Construction
27	232990	All Other Special Trade Contracting	Residential Building Construction
65	314120	Curtain and Linen Mills	Curtain and Linen Mills
66	314910	Textile Bag and Canvas Mills	Textile Bag and Canvas Mills
67	314990	All Other Textile Product Mills	All Other Textile Product Mills
83	321919	Other Millwork	Other Millwork
85	321999	All Other Miscellaneous Wood Product Manufacturing	All Other Wood Product Manufacturing
86	322111	Mechanical Pulp Mills	Pulp Mills
88	322122	Newsprint Mills	Newsprint Mills
93	322299	All Other Converted Paper Product Manufacturing	Other Converted Paper Product Manufacturing
98	324190	Other Petroleum and Coal Products Manufacturing	Other Petroleum and Coal Products Manufacturing
100	325120	Industrial Gas Manufacturing	Industrial Gas Manufacturing
102	325181	Alkali and Chlorine Manufacturing	Other Basic Chemical Manufacturing
102	325188	All Other Basic Inorganic Chemical Manufacturing	Other Basic Chemical Manufacturing
102	325190	Other Basic Organic Chemical Manufacturing	Other Basic Chemical Manufacturing
104	325314	Mixed Fertilizer Manufacturing	Fertilizer Manufacturing
105	325320	Pesticide and Other Agricultural Chemical Manufacturing	Pesticide and Other Agricultural Chemical Manufacturing
106	325410	Pharmaceutical and Medicine Manufacturing	Pharmaceutical and Medicine Manufacturing
107	325510	Paint and Coating Manufacturing	Paint and Coating Manufacturing
109	325610	Soap and Cleaning Compound Manufacturing	Soap and Cleaning Compound Manufacturing
111	325910	Printing Ink Manufacturing	Other Chemical Product Manufacturing
111	325991	Custom Compounding of Purchased Resins	Other Chemical Product Manufacturing
111	325999	All Other Miscellaneous Chemical Product Manufacturing	Other Chemical Product Manufacturing
112	326111	Unsupported Plastic Bag Manufacturing	Unsupported Plastic Film, Sheet and Bag Manufacturing
113	326121	Unsupported Plastic Profile Shape Manufacturing	Plastic Pipe, Pipe Fitting and Unsupported Profile Shape Manufacturing
113	326122	Plastic Pipe and Pipe Fitting Manufacturing	Plastic Pipe, Pipe Fitting and Unsupported Profile Shape Manufacturing
115	326160	Plastic Bottle Manufacturing	Plastic Bottle Manufacturing
116	326140	Polystyrene Foam Product Manufacturing	Polystyrene, Urethane and Other Foam Product Manufacturing
116	326150	Urethane and Other Foam Product (except Polystyrene Manufacturing)	Polystyrene, Urethane and Other Foam Product Manufacturing
118	326198	All Other Plastic Product Manufacturing	Miscellaneous Plastic Product Manufacturing
119	326210	Tire Manufacturing	Tire Manufacturing

Table 10. Input-Output industries with environment-related activities (continued)

Input-Output industry	North American Industry Classification System (NAICS) code	North American Industry Classification System (NAICS) description	Input-Output description
121	326290	Other Rubber Product Manufacturing	Other Rubber Product Manufacturing
122	327120	Clay Building Material and Refractory Manufacturing	Clay Product and Refractory Manufacturing
123	327214	Glass Manufacturing	Glass and Glass Product Manufacturing
123	327215	Glass Product Manufacturing from Purchased Glass	Glass and Glass Product Manufacturing
126	327330	Concrete Pipe, Brick and Block Manufacturing	Concrete Product Manufacturing
126	327390	Other Concrete Product Manufacturing	Concrete Product Manufacturing
127	327410	Lime Manufacturing	Lime and Gypsum Product Manufacturing
128	327910	Abrasive Product Manufacturing	Other Non-Metallic Mineral Product Manufacturing
128	327990	All Other Non-Metallic Mineral Product Manufacturing	Other Non-Metallic Mineral Product Manufacturing
130	331210	Iron and Steel Pipes and Tubes Manufacturing from Purchased Steel	Iron and Steel Pipes and Tubes Manufacturing from Purchased Steel
131	331222	Steel Wire Drawing	Rolling and Drawing of Purchased Steel
132	331313	Primary Production of Alumina and Aluminum	Primary Production of Alumina and Aluminum
133	331317	Aluminum Rolling, Drawing, Extruding and Alloying	Aluminum Rolling, Drawing, Extruding and Alloying
134	331410	Non-Ferrous Metal (except Aluminum) Smelting and Refining	Non-Ferrous Metal (except Aluminum) Smelting and Refining
135	331420	Copper Rolling, Drawing, Extruding and Alloying	Non-Ferrous Metal (except Aluminum) Rolling, Drawing, Extruding
136	331511	Iron Foundries	Ferrous Metal Foundries
137	331529	Non-Ferrous Foundries (except Die-Casting)	Non-Ferrous Metal Foundries
138	332118	Stamping	Forging and Stamping
140	332311	Prefabricated Metal Building and Component Manufacturing	Prefabricated Metal Building and Component Manufacturing
141	332314	Concrete Reinforcing Bar Manufacturing	All Other Plate Work and Fabricated Structural Products Manufacturing
141	332319	Other Plate Work and Fabricated Structural Product Manufacturing	All Other Plate Work and Fabricated Structural Products Manufacturing
142	332329	Other Ornamental and Architectural Metal Products Manufacturing	Ornamental and Architectural Metal Products Manufacturing
143	332410	Power Boiler and Heat Exchanger Manufacturing	Power Boiler and Heat Exchanger Manufacturing
144	332420	Metal Tank (Heavy Gauge) Manufacturing	Metal Tank (Heavy Gauge) Manufacturing
145	332439	Other Metal Container Manufacturing	Metal Can, Box and Other Metal Container (Light Gauge) Manufacturing
148	332710	Machine Shops	Machine Shops
150	332810	Coating, Engraving, Heat Treating and Allied Activities	Coating, Engraving, Heat Treating and Allied Activities
151	332910	Metal Valve Manufacturing	Other Fabricated Metal Product Manufacturing
151	332999	All Other Miscellaneous Fabricated Metal Product Manufacturing	Other Fabricated Metal Product Manufacturing
152	333110	Agricultural Implement Manufacturing	Agricultural Implement Manufacturing
153	333120	Construction Machinery Manufacturing	Construction Machinery Manufacturing
154	333130	Mining and Oil and Gas Field Machinery Manufacturing	Mining and Oil and Gas Field Machinery Manufacturing
155	333220	Rubber and Plastics Industry Machinery Manufacturing	Industrial Machinery Manufacturing
155	333291	Paper Industry Machinery Manufacturing	Industrial Machinery Manufacturing
155	333299	All Other Industrial Machinery Manufacturing	Industrial Machinery Manufacturing
156	333310	Commercial and Service Industry Machinery Manufacturing	Commercial and Service Industry Machinery Manufacturing
157	333413	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing	Ventilation, Heating, Air-Conditioning and Commercial Refrigeration Equipment
157	333416	Heating Equipment and Commercial Refrigeration Equipment Manufacturing	Ventilation, Heating, Air-Conditioning and Commercial Refrigeration Equipment
158	333519	Other Metalworking Machinery Manufacturing	Metalworking Machinery Manufacturing
159	333611	Turbine and Turbine Generator Set Unit Manufacturing	Engine, Turbine and Power Transmission Equipment
160	333910	Pump and Compressor Manufacturing	Pump and Compressor Manufacturing
161	333920	Material Handling Equipment Manufacturing	Material Handling Equipment Manufacturing
162	333990	All Other General-Purpose Machinery Manufacturing	All Other General-Purpose Machinery Manufacturing
163	334110	Computer and Peripheral Equipment Manufacturing	Computer and Peripheral Equipment Manufacturing
165	334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing
168	334410	Semiconductor and Other Electronic Component Manufacturing	Semiconductor and Other Electronic Component Manufacturing
169	334511	Navigational and Guidance Instruments Manufacturing	Navigational, Measuring, Medical and Control Instruments Manufacturing
169	334512	Measuring, Medical and Controlling Devices Manufacturing	Navigational, Measuring, Medical and Control Instruments Manufacturing
170	334610	Manufacturing and Reproducing Magnetic and Optical Media	Manufacturing and Reproducing Magnetic and Optical Media
172	335210	Small Electrical Appliance Manufacturing	Household Appliance Manufacturing
173	335311	Power, Distribution and Specialty Transformers Manufacturing	Power, Distribution and Specialty Transformers Manufacturing
174	335312	Motor and Generator Manufacturing	Motor and Generator Manufacturing
175	335315	Switchgear and Switchboard, and Relay and Industrial Control Apparatus Manufacturing	Switchgear and Switchboard, and Relay and Industrial Control Apparatus Manufacturing
176	335910	Battery Manufacturing	Battery Manufacturing
178	335990	All Other Electrical Equipment and Component Manufacturing	Wiring Devices and All Other Electrical Equipment Manufacturing
180	336120	Heavy-Duty Truck Manufacturing	Heavy-Duty Truck Manufacturing
181	336211	Motor Vehicle Body Manufacturing	Motor Vehicle Body and Trailer Manufacturing
181	336212	Truck Trailer Manufacturing	Motor Vehicle Body and Trailer Manufacturing
182	336310	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing†	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing
189	336390	Other Motor Vehicle Parts Manufacturing	Other Motor Vehicle Parts Manufacturing
200	339110	Medical Equipment and Supplies Manufacturing	Medical Equipment and Supplies Manufacturing
206	339990	All Other Miscellaneous Manufacturing	All Other Miscellaneous Manufacturing
207	412110	Petroleum Product Wholesaler-Distributors	Wholesale Trade
207	414110	Clothing and Clothing Accessories Wholesaler-Distributors	Wholesale Trade
207	414130	Piece Goods, Notions and Other Dry Goods Wholesaler-Distributors	Wholesale Trade

Table 10. Input-Output industries with environment-related activities (continued)

Input-Output industry	North American Industry Classification System (NAICS) code	North American Industry Classification System (NAICS) description	Input-Output description
207	414220	Household Appliance Wholesaler-Distributors	Wholesale Trade
207	414510	Pharmaceuticals and Pharmacy Supplies Wholesaler-Distributors	Wholesale Trade
207	415210	Tire Wholesaler-Distributors	Wholesale Trade
207	415310	Used Motor Vehicle Parts and Accessories Wholesaler-Distributors	Wholesale Trade
207	416110	Electrical Wiring and Construction Supplies Wholesaler-Distributors	Wholesale Trade
207	416120	Plumbing, Heating and Air-Conditioning Equipment and Supplies Wholesaler-Distributors	Wholesale Trade
207	416210	Metal Service Centres	Wholesale Trade
207	416310	General-Line Building Supplies Wholesaler-Distributors	Wholesale Trade
207	416320	Lumber, Plywood and Millwork Wholesaler-Distributors	Wholesale Trade
207	417110	Farm, Lawn and Garden Machinery and Equipment Wholesaler-Distributors	Wholesale Trade
207	417210	Construction and Forestry Machinery, Equipment and Supplies Wholesaler-Distributors	Wholesale Trade
207	417220	Mining and Oil and Gas Well Machinery, Equipment and Supplies Wholesaler-Distributors	Wholesale Trade
207	417230	Industrial Machinery, Equipment and Supplies Wholesaler-Distributors	Wholesale Trade
207	417310	Computer, Computer Peripheral and Pre-Packaged Software Wholesaler-Distributors	Wholesale Trade
207	417320	Electronic Components, Navigational and Communications Equipment and Supplies Wholesaler-Distributors	Wholesale Trade
207	417910	Office and Store Machinery and Equipment Wholesaler-Distributors	Wholesale Trade
207	417920	Service Establishment Machinery, Equipment and Supplies Wholesaler-Distributors	Wholesale Trade
207	417930	Professional Machinery, Equipment and Supplies Wholesaler-Distributors	Wholesale Trade
207	417990	All Other Machinery, Equipment and Supplies Wholesaler-Distributors	Wholesale Trade
207	418110	Recyclable Metal Wholesaler-Distributors	Wholesale Trade
207	418120	Recyclable Paper and Paperboard Wholesaler-Distributors	Wholesale Trade
207	418190	Other Recyclable Material Wholesaler-Distributors	Wholesale Trade
207	418220	Other Paper and Disposable Plastic Product Wholesaler-Distributors	Wholesale Trade
207	418390	Agricultural Chemical and Other Farm Supplies Wholesaler-Distributors	Wholesale Trade
207	418410	Chemical (except Agricultural) and Allied Product Wholesaler-Distributors	Wholesale Trade
207	418990	All Other Wholesaler-Distributors	Wholesale Trade
207	419160	Building Material and Supplies Agents and Brokers	Wholesale Trade
207	419170	Machinery, Equipment and Supplies Agents and Brokers	Wholesale Trade
207	419190	Other Wholesale Agents and Brokers	Wholesale Trade
208	443110	Appliance, Television and Other Electronics Store	Retail Trade
208	443120	Computer and Software Stores	Retail Trade
208	444130	Hardware Stores	Retail Trade
208	451130	Sewing, Needlework and Piece Goods Stores	Retail Trade
208	453999	All Other Miscellaneous Store Retailers (except Beer and Wine-Making Supplies Stores)	Retail Trade
208	454310	Fuel Dealers	Retail Trade
208	454390	Other Direct Selling Establishments	Retail Trade
210	482113	Mainline Freight Rail Transportation	Rail Transportation
212	484121	General Freight Trucking, Long Distance, Truck-Load	Truck Transportation
212	484222	Dry Bulk Materials Trucking, Local	Truck Transportation
212	484231	Bulk Liquids Trucking, Long Distance	Truck Transportation
220	488332	Ship Piloting Services	Support Activities for Transportation
225	511120	Periodical Publishers	Newspaper, Periodical, Book and Database Publishers
225	511130	Book Publishers	Newspaper, Periodical, Book and Database Publishers
226	511210	Software Publishers	Software Publishers
232	513390	Other Telecommunications	Telecommunications
234	514210	Data Processing Services	Data Processing Services
238	524111	Direct Individual Life, Health and Medical Insurance Carriers	Insurance Carriers
239	531120	Lessors of Non-Residential Buildings (except Mini-Warehouses)	Lessors of Real Estate
239	531190	Lessors of Other Real Estate Property	Lessors of Real Estate
242	532410	Construction, Transportation, Mining, and Forestry Machinery and Equipment Rental and Leasing	Rental and leasing (except Automotive Equipment)
242	532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing	Rental and leasing (except Automotive Equipment)
243	522299	All Other Non-Depository Credit Intermediation	Non-Depository Credit Intermediation and Activities
244	524210	Insurance Agencies and Brokerages	Agencies, Brokerages and Other Insurance Related Activities
244	524299	All Other Insurance Related Activities	Agencies, Brokerages and Other Insurance Related Activities
244	524291	Claims Adjusters	Agencies, Brokerages and Other Insurance Related Activities
245	523210	Securities and Commodity Exchanges	Securities, Commodity Contracts, Funds, and Other Financial Investment
245	523920	Portfolio Management	Securities, Commodity Contracts, Funds, and Other Financial Investment
245	523910	Miscellaneous Intermediation	Securities, Commodity Contracts, Funds, and Other Financial Investment
245	523990	All Other Financial Investment Activities	Securities, Commodity Contracts, Funds, and Other Financial Investment
247	551113	Holding Companies	Management of Companies and Enterprises
247	551114	Head Offices	Management of Companies and Enterprises

Table 10. Input-Output industries with environment-related activities (continued)

Input-Output industry	North American Industry Classification System (NAICS) code	North American Industry Classification System (NAICS) description	Input-Output description
248	541320	Landscape Architectural Services	Architectural, Engineering and Related Services
248	541330	Engineering Services	Architectural, Engineering and Related Services
248	541340	Drafting Services	Architectural, Engineering and Related Services
248	541350	Building Inspection Services	Architectural, Engineering and Related Services
248	541360	Geophysical Surveying and Mapping Services	Architectural, Engineering and Related Services
248	541370	Surveying and Mapping (except Geophysical) Services	Architectural, Engineering and Related Services
248	541380	Testing Laboratories	Architectural, Engineering and Related Services
248	541310	Architectural Services	Architectural, Engineering and Related Services
249	541510	Computer Systems Design and Related Services	Computer Systems Design and Related Services
250	541810	Advertising Agencies	Advertising and Related Services
250	541820	Public Relations Services	Advertising and Related Services
251	541110	Offices of Lawyers	Legal, Accounting, Tax Preparation, Bookkeeping and Payroll Services
251	541120	Offices of Notaries	Legal, Accounting, Tax Preparation, Bookkeeping and Payroll Services
251	541212	Offices of Accountants	Legal, Accounting, Tax Preparation, Bookkeeping and Payroll Services
252	541420	Industrial Design Services	Other Professional, Scientific and Technical Services
252	541611	Administrative Management and General Management	Other Professional, Scientific and Technical Services
252	541612	Human Resource and Executive Search Consulting Services	Other Professional, Scientific and Technical Services
252	541619	Other Management Consulting Services	Other Professional, Scientific and Technical Services
252	541620	Environmental Consulting Services	Other Professional, Scientific and Technical Services
252	541690	Other Scientific and Technical Consulting Services	Other Professional, Scientific and Technical Services
252	541710	Research and Development in the Physical, Engineering and Life Sciences	Other Professional, Scientific and Technical Services
252	541720	Research and Development in the Social Sciences and Humanities	Other Professional, Scientific and Technical Services
252	541910	Marketing Research and Public Opinion Polling	Other Professional, Scientific and Technical Services
252	541990	All Other Professional, Scientific and Technical	Other Professional, Scientific and Technical Services
255	561722	Janitorial Services (except Window Cleaning)	Services to Buildings and Dwellings
255	561791	Duct and Chimney Cleaning Services	Services to Buildings and Dwellings
255	561799	All Other Services to Buildings and Dwellings	Services to Buildings and Dwellings
256	561110	Office Administrative Services	Other Administrative and Support Services
256	561490	Other Business Support Services	Other Administrative and Support Services
256	561990	All Other Support Services	Other Administrative and Support Services
256	561410	Document Preparation Services	Other Administrative and Support Services
256	561910	Packaging and Labelling Services	Other Administrative and Support Services
257	562110	Waste Collection	Waste Management and Remediation Services
257	562210	Waste Treatment and Disposal	Waste Management and Remediation Services
257	562910	Remediation Services	Waste Management and Remediation Services
257	562920	Material Recovery Facilities	Waste Management and Remediation Services
257	562990	All Other Waste Management Services	Waste Management and Remediation Services
261	621510	Medical and Diagnostic Laboratories	Miscellaneous Ambulatory Health Care Services
272	811210	Electronic and Precision Equipment Repair and Maintenance	Repair and Maintenance (except Automotive Repair and Maintenance)
272	811310	Commercial and Industrial Machinery and Equipment	Repair and Maintenance (except Automotive Repair and Maintenance)

Source: Statistics Canada, Environment Accounts and Statistics Division.

Table 11. Environment Industry Survey results and industry gross output, by Input-Output industry, 1998

Input-Output industry	Description	Environment Industry Survey results		Gross output[1]
		Total revenues	Environmental revenues	
		thousands of dollars		
1	Greenhouse, Nursery and Floriculture Production	757	699	1 936 688
2	Crop Production (except Greenhouse, Nursery and Floriculture Production	0	0	16 965 666
3	Animal Aquaculture	2 550	1 504	536 529
4	Animal Production (except Animal Aquaculture)	0	0	15 402 430
5	Forestry and Logging	0	0	12 505 180
6	Fishing, Hunting and Trapping	0	0	1 691 810
7	Support Activities for Crop Production	2 557	2 222	267 364
8	Support Activities for Animal Production	0	0	241 750
9	Support Activities for Forestry	8 448	5 093	751 288
10	Oil and Gas extraction	2 160	2 142	26 545 445
11	Coal Mining	0	0	1 885 520
12	Iron Ore Mining	0	0	1 812 950
13	Gold and Silver Ore Mining	1 000	656	2 403 296
14	Copper, Nickel, Lead and Zinc Ore Mining	1 820	1 820	3 692 826
15	Other Metal Ore Mining	0	0	772 567
16	Stone Mining and Quarrying	11 224	598	657 579
17	Sand, Gravel, Clay, and Ceramic and Refractory Minerals Mining and Quarrying	954	27	908 819
19	Salt Mining	0	0	389 775
20	Asbestos Mining	0	0	163 269
21	Potash Mining	0	0	1 912 342
22	Miscellaneous Non-Metallic Mineral Mining and Quarrying & Diamond Extraction	7 861	211	445 804
23	Support Activities for Mining and Oil and Gas Extraction	601 340	196 826	7 233 425
24	Electric Power Generation, Transmission and Distribution	10 602	558	27 517 723
25	Natural Gas Distribution	4 000	4 000	3 465 851
26	Water, Sewage and Other Systems	17 553	14 431	296 764
27	Residential Building Construction	557 723	165 378	33 385 792
28	Non-residential Building Construction	0	0	19 565 368
29	Transportation Engineering Construction	0	0	5 222 736
30	Oil and Gas Engineering Construction	0	0	20 084 284
31	Electric Power Engineering Construction	0	0	3 594 643
32	Communication Engineering Construction	0	0	2 704 714
33	Other Engineering Construction	0	0	5 948 303
34	Repair Construction	0	0	16 388 871
35	Other Activities of the Construction Industry	0	0	630 697
36	Animal Food Manufacturing	0	0	4 313 755
37	Flour Milling and Malt Manufacturing	0	0	1 379 962
38	Starch and Vegetable Fat and Oil Manufacturing	0	0	3 676 311
39	Breakfast Cereal Manufacturing	0	0	1 075 844
40	Sugar Manufacturing	0	0	707 303
41	Confectionery Product Manufacturing	0	0	2 338 769
42	Frozen Food Manufacturing	0	0	1 741 108
43	Fruit and Vegetable Canning, Pickling and Drying	0	0	2 966 389
44	Dairy Product Manufacturing	0	0	9 110 726
45	Animal (except Poultry) Slaughtering	0	0	7 512 095
46	Rendering and Meat Processing from Carcasses	0	0	3 458 624
47	Poultry Processing	0	0	3 455 829
48	Seafood Product Preparation and Packaging	0	0	3 158 325
49	Bread and Bakery Product Manufacturing	0	0	2 562 295
50	Cookie and Cracker Manufacturing	0	0	1 012 513
51	Flour Mixes and Dough Manufacturing from Purchased Flour	0	0	672 387
52	Dry Pasta and Tortilla Manufacturing	0	0	219 056
53	Snack Food Manufacturing	0	0	1 282 277
54	Coffee and Tea Manufacturing	0	0	1 323 003
55	Other Miscellaneous Food Manufacturing	0	0	1 937 002
56	Soft Drink and Ice Manufacturing	0	0	3 206 909
57	Breweries	0	0	3 631 669
58	Wineries	0	0	411 119
59	Distilleries	0	0	987 052
60	Tobacco Manufacturing	0	0	3 456 023
61	Fibre, Yarn and Thread Mills	0	0	705 675
62	Fabric Mills	0	0	2 830 789
63	Textile and Fabric Finishing and Fabric Coating	0	0	717 934
64	Carpet and Rug Mills	0	0	932 310

Table 11. Environment Industry Survey results and industry gross output, by Input-Output industry, 1998 (continued)

Input-Output industry	Description	Environment Industry Survey results		Gross output[1]
		Total revenues	Environmental revenues	
		thousands of dollars		
65	Curtain and Linen Mills	1 100	110	706 348
66	Textile Bag and Canvas Mills	19 544	9 853	339 004
67	All Other Textile Product Mills	27 609	21 805	378 994
68	Hosiery and Sock Mills	0	0	469 367
69	Other Clothing Knitting Mills	0	0	564 736
70	Cut and Sew Clothing Contracting	0	0	534 375
71	Men's and Boys' Cut and Sew Clothing Manufacturing	0	0	2 188 091
72	Women's and Girls' Cut and Sew Clothing Manufacturing	0	0	2 842 028
73	Other Cut and Sew Clothing Manufacturing	0	0	359 393
74	Clothing Accessories and Other Clothing Manufacturing	0	0	271 616
75	Leather and Hide Tanning and Finishing	0	0	186 602
76	Footwear Manufacturing	0	0	561 881
77	Other Leather and Allied Product Manufacturing	0	0	164 748
78	Sawmills and Wood Preservation	0	0	17 032 000
79	Structural Wood Product Manufacturing	0	0	564 103
80	Veneer and Plywood Mills	0	0	1 715 122
81	Particle Board, Fibreboard, and Waferboard Mills	0	0	2 764 361
82	Wood Window and Door Manufacturing	0	0	1 227 328
83	Other Millwork	6 245	3 046	1 565 323
84	Wood Container and Pallet Manufacturing	0	0	456 322
85	All Other Wood Product Manufacturing	152	151	1 104 067
86	Pulp Mills	0	0	6 293 118
87	Paper (except Newsprint) Mills	0	0	5 010 963
88	Newsprint Mills	1 291	1 097	9 439 599
89	Paperboard Mills	0	0	1 922 027
90	Paperboard Container Manufacturing	34 594	0	3 922 686
91	Paper Bag and Coated and Treated Paper Manufacturing	0	0	1 933 387
92	Stationery Product Manufacturing	0	0	506 011
93	Other Converted Paper Product Manufacturing	6 116	5 881	1 410 304
94	Printing	0	0	8 856 389
95	Support Activities for Printing	0	0	722 687
96	Petroleum Refineries	0	0	15 700 239
97	Asphalt Paving, Roofing and Saturated Materials Manufacturing	0	0	1 000 736
98	Other Petroleum and Coal Products Manufacturing	9 822	255	940 445
99	Petrochemical Manufacturing	0	0	2 749 382
100	Industrial Gas Manufacturing	410 000	4 100	488 738
101	Synthetic Dye and Pigment Manufacturing	0	0	646 178
102	Other Basic Chemical Manufacturing	276 369	46 190	5 070 320
103	Resin, Synthetic Rubber, and Artificial and Synthetic Fibres and Filament	0	0	6 850 870
104	Fertilizer Manufacturing	10 537	6 826	2 402 128
105	Pesticide and Other Agricultural Chemical Manufacturing	208 640	79	576 933
106	Pharmaceutical and Medicine Manufacturing	2 500	1 462	5 349 906
107	Paint and Coating Manufacturing	1 489	0	2 070 414
108	Adhesive Manufacturing	0	0	484 229
109	Soap and Cleaning Compound Manufacturing	52 999	15 928	2 162 367
110	Toilet Preparation Manufacturing	0	0	1 194 930
111	Other Chemical Product Manufacturing	266 669	147 122	3 620 102
112	Unsupported Plastic Film, Sheet and Bag Manufacturing	102 281	57 673	2 492 807
113	Plastic Pipe, Pipe Fitting and Unsupported Profile Shape Manufacturing	496 585	437 361	1 654 854
114	Laminated Plastic Plate, Sheet and Shape Manufacturing	0	0	660 338
115	Plastic Bottle Manufacturing	0	0	594 647
116	Polystyrene, Urethane and Other Foam Product Manufacturing	18 068	12 803	801 762
117	Motor Vehicle Plastic Parts Manufacturing	0	0	2 395 401
118	Miscellaneous Plastic Product Manufacturing	212 426	93 106	4 397 089
119	Tire Manufacturing	141	118	2 811 406
120	Rubber and Plastic Hose and Belting Manufacturing	0	0	590 075
121	Other Rubber Product Manufacturing	27 968	18 652	2 108 525
122	Clay Product and Refractory Manufacturing	0	0	579 658
123	Glass and Glass Product Manufacturing	1 324	100	2 003 153
124	Cement Manufacturing	0	0	1 235 383
125	Ready-Mix Concrete Manufacturing	0	0	1 974 092
126	Concrete Product Manufacturing	72 050	50 937	1 235 740
127	Lime and Gypsum Product Manufacturing	60 557	12 445	996 241
128	Other Non-Metallic Mineral Product Manufacturing	46 925	40 448	1 258 286

Table 11. Environment Industry Survey results and industry gross output, by Input-Output industry, 1998 (continued)

Input-Output industry	Description	Environment Industry Survey results		Gross output[1]
		Total revenues	Environmental revenues	
		thousands of dollars		
129	Iron and Steel Mills and Ferro-Alloy Manufacturing	0	0	10 878 897
130	Iron and Steel Pipes and Tubes Manufacturing from Purchased Steel	5 931	5 931	2 765 711
131	Rolling and Drawing of Purchased Steel	148 737	59 890	1 143 374
132	Primary Production of Alumina and Aluminum	3 582	3 582	5 298 225
133	Aluminum Rolling, Drawing, Extruding and Alloying	4 500	100	2 931 144
134	Non-Ferrous Metal (except Aluminum) Smelting and Refining	0	0	8 272 393
135	Non-Ferrous Metal (except Aluminum) Rolling, Drawing, Extruding	223	223	1 717 078
136	Ferrous Metal Foundries	151 399	79 209	1 500 445
137	Non-Ferrous Metal Foundries	921	0	1 418 479
138	Forging and Stamping	13 873	85	1 660 685
139	Cutlery and Hand Tool Manufacturing	0	0	410 003
140	Prefabricated Metal Building and Component Manufacturing	33 410	1 000	589 049
141	All Other Plate Work and Fabricated Structural Product Manufacturing	30 005	3 844	3 084 469
142	Ornamental and Architectural Metal Products Manufacturing	69 438	67 518	3 548 008
143	Power Boiler and Heat Exchanger Manufacturing	245 898	145 474	769 047
144	Metal Tank (Heavy Gauge) Manufacturing	29 151	16 659	719 364
145	Metal Can, Box and Other Metal Container (Light Gauge) Manufacturing	49 323	7 369	1 771 367
146	Hardware Manufacturing	0	0	1 510 469
147	Spring and Wire Product Manufacturing	0	0	1 280 891
148	Machine Shops	4 309	2 520	2 225 056
149	Turned Product and Screw, Nut and Bolt Manufacturing	0	0	842 646
150	Coating, Engraving, Heat Treating and Allied Activities	3 305	1 976	1 877 026
151	Other Fabricated Metal Product Manufacturing	154 692	63 557	2 863 070
152	Agricultural Implement Manufacturing	24 223	2 245	2 594 092
153	Construction Machinery Manufacturing	1 139	1 028	1 527 961
154	Mining and Oil and Gas Field Machinery Manufacturing	10 821	4 521	1 279 506
155	Industrial Machinery Manufacturing	235 765	111 693	3 249 141
156	Commercial and Service Industry Machinery Manufacturing	271 804	219 701	1 771 275
157	Ventilation, Heating, Air-Conditioning and Commercial Refrigeration Equipment	172 123	99 788	1 821 229
158	Metalworking Machinery Manufacturing	99 787	39 394	3 333 456
159	Engine, Turbine and Power Transmission Equipment Manufacturing	707	652	1 888 223
160	Pump and Compressor Manufacturing	122 817	34 043	1 469 917
161	Material Handling Equipment Manufacturing	42 965	21 318	2 371 732
162	All Other General-Purpose Machinery Manufacturing	174 239	105 651	2 147 425
163	Computer and Peripheral Equipment Manufacturing	187	157	5 385 563
164	Telephone Apparatus Manufacturing	0	0	7 197 473
165	Radio and Television Broadcasting and Wireless Communications Equipment	125 311	9 891	1 437 017
166	Other Communications Equipment Manufacturing	0	0	515 417
167	Audio and Video Equipment Manufacturing	0	0	255 437
168	Semiconductor and Other Electronic Component Manufacturing	6 808	1 873	6 982 325
169	Navigational, Measuring, Medical and Control Instruments Manufacturing	280 572	101 735	3 621 997
170	Manufacturing and Reproducing Magnetic and Optical Media	10 000	10 000	586 781
171	Electric Lighting Equipment Manufacturing	0	0	1 127 066
172	Household Appliance Manufacturing	4 952	2 896	1 763 511
173	Power, Distribution and Specialty Transformers Manufacturing	567 026	26 121	848 377
174	Motor and Generator Manufacturing	183 508	134 321	657 986
175	Switchgear and Switchboard, and Relay and Industrial Control Apparatus	15 459	6 595	1 250 469
176	Battery Manufacturing	5 744	2 746	260 840
177	Communication and Energy Wire and Cable Manufacturing	0	0	2 035 844
178	Wiring Devices and All Other Electrical Equipment and Component manufacturing	8 000	4 414	1 098 631
179	Automobile and Light-Duty Motor Vehicle Manufacturing	0	0	53 891 932
180	Heavy-Duty Truck Manufacturing	34 423	34 423	5 295 457
181	Motor Vehicle Body and Trailer Manufacturing	37 715	8 981	2 691 001
182	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	15 390	10 267	5 613 055
183	Motor Vehicle Electrical and Electronic Equipment Manufacturing	0	0	1 442 733
184	Motor Vehicle Steering and Suspension Components (except Springs) Manufacturing	0	0	1 533 202
185	Motor Vehicle Brake System Manufacturing	0	0	1 737 625
186	Motor Vehicle Transmission and Power Train Parts Manufacturing	0	0	3 671 612
187	Motor Vehicle Seating and Interior Trim Manufacturing	0	0	4 433 290
188	Motor Vehicle Metal Stamping	0	0	3 794 565
189	Other Motor Vehicle Parts Manufacturing	0	0	4 107 809
190	Aerospace Product and Parts Manufacturing	0	0	9 784 244
191	Railroad Rolling Stock Manufacturing	0	0	3 447 574

Table 11. Environment Industry Survey results and industry gross output, by Input-Output industry, 1998 (continued)

Input-Output industry	Description	Environment Industry Survey results		Gross output[1]
		Total revenues	Environmental revenues	
		thousands of dollars		
192	Ship Building and Repairing	0	0	418 752
193	Boat Building	0	0	475 029
194	Other Transportation Equipment Manufacturing	0	0	1 600 436
195	Wood Kitchen Cabinet and Counter Top Manufacturing	0	0	1 454 721
196	Institutional Furniture Manufacturing	0	0	705 831
197	Household Furniture Manufacturing	0	0	2 510 028
198	Office Furniture (including Fixtures) Manufacturing	0	0	3 684 735
199	Other Furniture-Related Product Manufacturing	0	0	853 759
200	Medical Equipment and Supplies Manufacturing	7 715	4 947	1 446 800
201	Jewellery and Silverware Manufacturing	0	0	1 396 177
202	Sporting and Athletic Goods Manufacturing	0	0	1 127 617
203	Doll, Toy and Game Manufacturing	0	0	410 468
204	Office Supplies (except Paper) Manufacturing	0	0	151 425
205	Sign Manufacturing	0	0	726 944
206	All Other Miscellaneous Manufacturing	5 194	4 684	1 010 303
207	Wholesale Trade	4 073 029	3 191 246	73 847 170
208	Retail Trade	129 104	54 017	71 344 751
209	Air Transportation	0	0	12 726 619
210	Rail Transportation	2 247	143	7 338 940
211	Water Transportation	0	0	2 402 797
212	Truck Transportation	19 428	5 153	22 370 843
213	Urban Transit Systems	0	0	1 749 200
214	Interurban and Rural Bus Transportation	0	0	357 815
215	Taxi and Limousine Service	0	0	1 165 080
216	All Other Transit and Ground Passenger Transportation	0	0	1 484 397
217	Pipeline Transportation of Natural Gas	0	0	3 771 501
218	Crude Oil and Other Pipeline Transportation	0	0	1 278 804
219	Scenic and Sightseeing Transportation	0	0	195 728
220	Support Activities for Transportation	801	488	7 795 521
221	Postal Service	0	0	4 229 947
222	Couriers and Messengers	0	0	3 628 312
223	Farm Product Warehousing and Storage	0	0	818 036
224	All Other Warehousing and Storage	0	0	977 674
225	Newspaper, Periodical, Book and Database Publishers	3 870	3 151	8 546 025
226	Software Publishers	12 083	11 831	3 975 971
227	Motion Picture and Video Exhibition	0	0	822 125
228	Motion Picture and Video Production, Distribution, Post-Production	0	0	3 686 196
229	Sound Recording Industries	0	0	1 095 006
230	Radio and Television Broadcasting	0	0	2 836 138
231	Pay TV, Specialty TV and Program Distribution	0	0	3 503 248
232	Telecommunications	2 400	240	22 356 335
233	Information Services	0	0	705 623
234	Data Processing Services	4 900	4 900	1 029 672
235	Monetary Authorities	0	0	194 400
236	Local Credit Unions	0	0	3 627 046
237	Banking and Other Depository Credit Intermediation	0	0	35 123 637
238	Insurance Carriers	0	0	22 189 396
239	Lessors of Real Estate	3 385	3 052	46 579 057
240	Owner-Occupied Dwellings	0	0	76 750 800
241	Automotive Equipment Rental and Leasing	0	0	3 828 969
242	Rental and leasing (except Automotive Equipment) and Lessors of Non-Fin.	2 717	2 133	5 518 504
243	Non-Depository Credit Intermediation and Activities Related to Credit	0	0	5 077 280
244	Agencies, Brokerages and Other Insurance Related Activities	0	0	7 318 006
245	Securities, Commodity Contracts, Funds, and Other Financial Investment	0	0	16 947 179
246	Offices of Real Estate Agents and Brokers and Activities Related	0	0	7 394 163
247	Management of Companies and Enterprises	0	0	10 393 011
248	Architectural, Engineering and Related Services	5 420 637	2 208 009	14 571 703
249	Computer Systems Design and Related Services	147 914	33 255	11 531 418
250	Advertising and Related Services	494	434	3 659 476
251	Legal, Accounting, Tax Preparation, Bookkeeping and Payroll Services	0	0	14 779 418
252	Other Professional, Scientific and Technical Services	17 459	2 909	10 926 089
253	Travel Arrangement and Reservation Services	0	0	2 677 679
254	Investigation and Security Services	0	0	2 415 566
255	Services to Buildings and Dwellings	33 188	29 455	4 019 534

Table 11. Environment Industry Survey results and industry gross output, by Input-Output industry, 1998 (continued)

Input-Output industry	Description	Environment Industry Survey results		Gross output[1]
		Total revenues	Environmental revenues	
		thousands of dollars		
256	Other Administrative and Support Services	19 886	7 705	13 869 563
257	Waste Management and Remediation Services	3 041 991	3 039 280	3 041 991
258	Education and Educational Support Services (excluding non-profit)	0	0	2 447 286
259	Offices of Physicians	0	0	10 862 938
260	Offices of Dentists	0	0	6 284 179
261	Miscellaneous Ambulatory Health Care Services	50 513	23 035	4 895 489
262	Nursing and Residential Care Facilities	0	0	2 431 458
263	Social Assistance	0	0	3 297 172
264	Performing Arts, Spectator Sports and Related Industries	0	0	3 837 020
265	Heritage Institutions (excluding Government Funded)	0	0	318 372
266	Gambling Industries	0	0	3 417 483
267	Amusement and Recreation Industries	0	0	4 089 551
268	Traveller Accommodation	0	0	10 026 097
269	RV (Recreational Vehicle) Parks, Recreational Camps, and Rooming	0	0	1 682 166
270	Food Services and Drinking Places	0	0	29 998 399
271	Automotive Repair and Maintenance	0	0	5 349 195
272	Repair and Maintenance (except Automotive Repair and Maintenance)	28 555	24 132	3 346 654
273	Funeral Services	0	0	1 056 258
274	Dry Cleaning and Laundry Services	0	0	1 701 046
275	Personal Care Services and Other Personal Services	0	0	5 178 466
276	Grant-Making, Civic, and Professional and Similar Organizations	0	0	1 840 714
277	Private Households	0	0	2 176 764
278	Operating Supplies	0	0	39 084 684
279	Office Supplies	0	0	8 680 151
280	Cafeteria Supplies	0	0	1 794 509
281	Laboratory Supplies	0	0	2 161 016
282	Travel and Entertainment	0	0	20 206 424
283	Advertising and Promotion	0	0	16 945 116
284	Transportation Margins	0	0	22 163 650
285	Religious Organizations	0	0	3 736 824
286	Non-Profit Welfare Organizations	0	0	2 339 614
287	Non-Profit Sports and Recreation Clubs	0	0	1 078 367
288	Non-Profit Education Services	0	0	1 864 149
289	Other Non-Profit Institutions Serving Households	0	0	7 126 046
290	Hospitals	0	0	28 209 31.
291	Government Residential Care Facilities	0	0	5 619 619
292	Universities	0	0	11 612 250
293	Government Elementary and Secondary Schools	0	0	32 875 756
294	Government Community Colleges and C.E.G.E.P.s	0	0	5 162 684
295	Other Government Education Services	0	0	493 489
297	Other Municipal Government Services	0	0	32 011 553
298	Other Provincial and Territorial Government Services	0	0	58 218 859
299	Other Federal Government Services including Defence services	0	0	26 755 800
300	Other Aboriginal Government Services	0	0	0

Notes:
i) This table validates the results from the surveyed portion of the industry collected through the Environment Industry Survey by comparing the survey results with the gross output of the industry as a whole.
ii) The following are not covered in the Environment Industry: governments, colleges, universities, schools, non-profit organizations.
1. Based on data produced by Input-Output Division, Statistics Canada.
Source: Statistics Canada, Environment Accounts and Statistics Division.

Table 12. Estimates of environmental employment using concordance list based on the Input-Output Classification (measure 4), by Input-Output industry, 1998

Input-Output industry	Description	Ratio of environmental revenues to gross output[1]	Total number of jobs[2]	Estimated number of jobs generated by the environment industry[3]
1	Greenhouse, Nursery and Floriculture Production	0.0004	30 716	11
2	Crop Production (except Greenhouse, Nursery and Floriculture Production	0.0000	231 895	0
3	Animal Aquaculture	0.0028	4 392	12
4	Animal Production (except Animal Aquaculture)	0.0000	166 779	0
5	Forestry and Logging	0.0000	59 020	0
6	Fishing, Hunting and Trapping	0.0000	24 714	0
7	Support Activities for Crop Production	0.0083	6 290	52
8	Support Activities for Animal Production	0.0000	4 485	0
9	Support Activities for Forestry	0.0068	13 563	92
10	Oil and Gas extraction	0.0001	34 883	3
11	Coal Mining	0.0000	9 485	0
12	Iron Ore Mining	0.0000	6 429	0
13	Gold and Silver Ore Mining	0.0003	10 554	3
14	Copper, Nickel, Lead and Zinc Ore Mining	0.0005	21 747	11
15	Other Metal Ore Mining	0.0000	2 457	0
16	Stone Mining and Quarrying	0.0009	3 593	3
17	Sand, Gravel, Clay, and Ceramic and Refractory Minerals Mining and Quarrying	0.0000	6 006	0
19	Salt Mining	0.0000	1 639	0
20	Asbestos Mining	0.0000	1 660	0
21	Potash Mining	0.0000	4 361	0
22	Miscellaneous Non-Metallic Mineral Mining and Quarrying & Diamond extraction	0.0005	3 296	2
23	Support Activities for Mining and Oil and Gas Extraction	0.0272	51 755	1 408
24	Electric Power Generation, Transmission and Distribution	0.0000	83 713	2
25	Natural Gas Distribution	0.0012	12 697	15
26	Water, Sewage and Other Systems	0.0486	1 520	74
27	Residential Building Construction	0.0050	267 774	1 326
28	Non-residential Building Construction	0.0000	187 861	0
29	Transportation Engineering Construction	0.0000	37 055	0
30	Oil and Gas Engineering Construction	0.0000	94 219	0
31	Electric Power Engineering Construction	0.0000	17 771	0
32	Communication Engineering Construction	0.0000	11 005	0
33	Other Engineering Construction	0.0000	38 110	0
34	Repair Construction	0.0000	184 972	0
35	Other Activities of the Construction Industry	0.0000	4 191	0
36	Animal Food Manufacturing	0.0000	11 631	0
37	Flour Milling and Malt Manufacturing	0.0000	2 406	0
38	Starch and Vegetable Fat and Oil Manufacturing	0.0000	2 892	0
39	Breakfast Cereal Manufacturing	0.0000	2 945	0
40	Sugar Manufacturing	0.0000	1 434	0
41	Confectionery Product Manufacturing	0.0000	10 833	0
42	Frozen Food Manufacturing	0.0000	6 709	0
43	Fruit and Vegetable Canning, Pickling and Drying	0.0000	13 475	0
44	Dairy Product Manufacturing	0.0000	20 781	0
45	Animal (except Poultry) Slaughtering	0.0000	22 943	0
46	Rendering and Meat Processing from Carcasses	0.0000	15 569	0
47	Poultry Processing	0.0000	18 504	0
48	Seafood Product Preparation and Packaging	0.0000	23 536	0
49	Bread and Bakery Product Manufacturing	0.0000	27 113	0
50	Cookie and Cracker Manufacturing	0.0000	7 137	0
51	Flour Mixes and Dough Manufacturing from Purchased Flour	0.0000	2 442	0
52	Dry Pasta and Tortilla Manufacturing	0.0000	1 623	0
53	Snack Food Manufacturing	0.0000	7 108	0
54	Coffee and Tea Manufacturing	0.0000	3 759	0
55	Other Miscellaneous Food Manufacturing	0.0000	8 705	0
56	Soft Drink and Ice Manufacturing	0.0000	12 383	0
57	Breweries	0.0000	9 778	0
58	Wineries	0.0000	1 336	0
59	Distilleries	0.0000	2 164	0
60	Tobacco Manufacturing	0.0000	4 377	0
61	Fibre, Yarn and Thread Mills	0.0000	4 223	0
62	Fabric Mills	0.0000	18 685	0
63	Textile and Fabric Finishing and Fabric Coating	0.0000	4 773	0
64	Carpet and Rug Mills	0.0000	3 772	0

Table 12. Estimates of environmental employment using concordance list based on the Input-Output Classification (measure 4), by Input-Output industry, 1998 (continued)

Input-Output industry	Description	Ratio of environmental revenues to gross output[1]	Total number of jobs[2]	Estimated number of jobs generated by the environment industry[3]
65	Curtain and Linen Mills	0.0002	5 421	1
66	Textile Bag and Canvas Mills	0.0291	4 742	138
67	All Other Textile Product Mills	0.0575	4 367	251
68	Hosiery and Sock Mills	0.0000	5 728	0
69	Other Clothing Knitting Mills	0.0000	8 954	0
70	Cut and Sew Clothing Contracting	0.0000	14 437	0
71	Men's and Boys' Cut and Sew Clothing Manufacturing	0.0000	30 974	0
72	Women's and Girls' Cut and Sew Clothing Manufacturing	0.0000	25 348	0
73	Other Cut and Sew Clothing Manufacturing	0.0000	3 841	0
74	Clothing Accessories and Other Clothing Manufacturing	0.0000	3 448	0
75	Leather and Hide Tanning and Finishing	0.0000	1 392	0
76	Footwear Manufacturing	0.0000	8 343	0
77	Other Leather and Allied Product Manufacturing	0.0000	2 594	0
78	Sawmills and Wood Preservation	0.0000	64 343	0
79	Structural Wood Product Manufacturing	0.0000	4 907	0
80	Veneer and Plywood Mills	0.0000	9 276	0
81	Particle Board, Fibreboard, and Waferboard Mills	0.0000	7 568	0
82	Wood Window and Door Manufacturing	0.0000	10 519	0
83	Other Millwork	0.0019	13 631	27
84	Wood Container and Pallet Manufacturing	0.0000	4 230	0
85	All Other Wood Product Manufacturing	0.0001	10 330	1
86	Pulp Mills	0.0000	17 125	0
87	Paper (except Newsprint) Mills	0.0000	14 413	0
88	Newsprint Mills	0.0001	25 817	3
89	Paperboard Mills	0.0000	6 694	0
90	Paperboard Container Manufacturing	0.0000	20 978	0
91	Paper Bag and Coated and Treated Paper Manufacturing	0.0000	9 224	0
92	Stationery Product Manufacturing	0.0000	3 065	0
93	Other Converted Paper Product Manufacturing	0.0042	5 517	23
94	Printing	0.0000	77 970	0
95	Support Activities for Printing	0.0000	10 130	0
96	Petroleum Refineries	0.0000	8 952	0
97	Asphalt Paving, Roofing and Saturated Materials Manufacturing	0.0000	2 450	0
98	Other Petroleum and Coal Products Manufacturing	0.0003	1 985	1
99	Petrochemical Manufacturing	0.0000	1 640	0
100	Industrial Gas Manufacturing	0.0084	1 314	11
101	Synthetic Dye and Pigment Manufacturing	0.0000	1 654	0
102	Other Basic Chemical Manufacturing	0.0091	9 773	89
103	Resin, Synthetic Rubber, and Artificial and Synthetic Fibres and Filament	0.0000	13 313	0
104	Fertilizer Manufacturing	0.0028	3 776	11
105	Pesticide and Other Agricultural Chemical Manufacturing	0.0001	765	0
106	Pharmaceutical and Medicine Manufacturing	0.0003	22 275	6
107	Paint and Coating Manufacturing	0.0000	7 831	0
108	Adhesive Manufacturing	0.0000	2 370	0
109	Soap and Cleaning Compound Manufacturing	0.0074	7 008	52
110	Toilet Preparation Manufacturing	0.0000	8 220	0
111	Other Chemical Product Manufacturing	0.0406	15 988	650
112	Unsupported Plastic Film, Sheet and Bag Manufacturing	0.0231	13 264	307
113	Plastic Pipe, Pipe Fitting and Unsupported Profile Shape Manufacturing	0.2643	10 268	2 714
114	Laminated Plastic Plate, Sheet and Shape Manufacturing	0.0000	3 220	0
115	Plastic Bottle Manufacturing	0.0000	3 845	0
116	Polystyrene, Urethane and Other Foam Product Manufacturing	0.0160	4 894	78
117	Motor Vehicle Plastic Parts Manufacturing	0.0000	14 980	0
118	Miscellaneous Plastic Product Manufacturing	0.0212	35 231	746
119	Tire Manufacturing	0.0000	9 914	0
120	Rubber and Plastic Hose and Belting Manufacturing	0.0000	3 486	0
121	Other Rubber Product Manufacturing	0.0088	14 568	129
122	Clay Product and Refractory Manufacturing	0.0000	5 973	0
123	Glass and Glass Product Manufacturing	0.0000	11 366	1
124	Cement Manufacturing	0.0000	2 922	0
125	Ready-Mix Concrete Manufacturing	0.0000	11 639	0
126	Concrete Product Manufacturing	0.0412	9 578	395
127	Lime and Gypsum Product Manufacturing	0.0125	3 388	42
128	Other Non-Metallic Mineral Product Manufacturing	0.0321	6 927	223
129	Iron and Steel Mills and Ferro-Alloy Manufacturing	0.0000	26 802	0

Table 12. Estimates of environmental employment using concordance list based on the Input-Output Classification (measure 4), by Input-Output industry, 1998 (continued)

Input-Output industry	Description	Ratio of environmental revenues to gross output[1]	Total number of jobs[2]	Estimated number of jobs generated by the environment industry[3]
130	Iron and Steel Pipes and Tubes Manufacturing from Purchased Steel	0.0021	7 447	16
131	Rolling and Drawing of Purchased Steel	0.0524	3 804	199
132	Primary Production of Alumina and Aluminum	0.0007	13 193	9
133	Aluminum Rolling, Drawing, Extruding and Alloying	0.0000	4 874	0
134	Non-Ferrous Metal (except Aluminum) Smelting and Refining	0.0000	14 058	0
135	Non-Ferrous Metal (except Aluminum) Rolling, Drawing, Extruding	0.0001	3 402	0
136	Ferrous Metal Foundries	0.0528	9 202	486
137	Non-Ferrous Metal Foundries	0.0000	6 780	0
138	Forging and Stamping	0.0001	15 174	1
139	Cutlery and Hand Tool Manufacturing	0.0000	4 637	0
140	Prefabricated Metal Building and Component Manufacturing	0.0017	5 379	9
141	All Other Plate Work and Fabricated Structural Product Manufacturing	0.0012	20 736	26
142	Ornamental and Architectural Metal Products Manufacturing	0.0190	27 136	516
143	Power Boiler and Heat Exchanger Manufacturing	0.1892	3 816	722
144	Metal Tank (Heavy Gauge) Manufacturing	0.0232	5 580	129
145	Metal Can, Box and Other Metal Container (Light Gauge) Manufacturing	0.0042	7 018	29
146	Hardware Manufacturing	0.0000	9 718	0
147	Spring and Wire Product Manufacturing	0.0000	10 223	0
148	Machine Shops	0.0011	25 707	29
149	Turned Product and Screw, Nut and Bolt Manufacturing	0.0000	6 060	0
150	Coating, Engraving, Heat Treating and Allied Activities	0.0011	14 976	16
151	Other Fabricated Metal Product Manufacturing	0.0222	19 595	435
152	Agricultural Implement Manufacturing	0.0009	12 989	11
153	Construction Machinery Manufacturing	0.0007	7 287	5
154	Mining and Oil and Gas Field Machinery Manufacturing	0.0035	7 532	27
155	Industrial Machinery Manufacturing	0.0344	18 742	644
156	Commercial and Service Industry Machinery Manufacturing	0.1240	10 717	1 329
157	Ventilation, Heating, Air-Conditioning and Commercial Refrigeration Equipment	0.0548	13 098	718
158	Metalworking Machinery Manufacturing	0.0118	29 366	347
159	Engine, Turbine and Power Transmission Equipment Manufacturing	0.0003	9 861	3
160	Pump and Compressor Manufacturing	0.0232	6 543	152
161	Material Handling Equipment Manufacturing	0.0090	15 995	144
162	All Other General-Purpose Machinery Manufacturing	0.0492	15 115	744
163	Computer and Peripheral Equipment Manufacturing	0.0000	14 522	0
164	Telephone Apparatus Manufacturing	0.0000	21 392	0
165	Radio and Television Broadcasting and Wireless Communications Equipment	0.0069	8 727	60
166	Other Communications Equipment Manufacturing	0.0000	3 888	0
167	Audio and Video Equipment Manufacturing	0.0000	1 785	0
168	Semiconductor and Other Electronic Component Manufacturing	0.0003	21 638	6
169	Navigational, Measuring, Medical and Control Instruments Manufacturing	0.0281	26 272	738
170	Manufacturing and Reproducing Magnetic and Optical Media	0.0170	3 795	65
171	Electric Lighting Equipment Manufacturing	0.0000	9 049	0
172	Household Appliance Manufacturing	0.0016	8 797	14
173	Power, Distribution and Specialty Transformers Manufacturing	0.0308	5 141	158
174	Motor and Generator Manufacturing	0.2041	3 274	668
175	Switchgear and Switchboard, and Relay and Industrial Control Apparatus	0.0053	7 884	41
176	Battery Manufacturing	0.0105	1 379	15
177	Communication and Energy Wire and Cable Manufacturing	0.0000	7 153	0
178	Wiring Devices and All Other Electrical Equipment and Component manufacturing	0.0040	6 874	28
179	Automobile and Light-Duty Motor Vehicle Manufacturing	0.0000	41 549	0
180	Heavy-Duty Truck Manufacturing	0.0065	10 246	67
181	Motor Vehicle Body and Trailer Manufacturing	0.0033	17 051	57
182	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	0.0018	11 661	21
183	Motor Vehicle Electrical and Electronic Equipment Manufacturing	0.0000	7 148	0
184	Motor Vehicle Steering and Suspension Components (except Springs) Manufacturing	0.0000	6 825	0
185	Motor Vehicle Brake System Manufacturing	0.0000	8 304	0
186	Motor Vehicle Transmission and Power Train Parts Manufacturing	0.0000	13 398	0
187	Motor Vehicle Seating and Interior Trim Manufacturing	0.0000	13 929	0
188	Motor Vehicle Metal Stamping	0.0000	17 403	0

Table 12. Estimates of environmental employment using concordance list based on the Input-Output Classification (measure 4), by Input-Output industry, 1998 (continued)

Input-Output industry	Description	Ratio of environmental revenues to gross output[1]	Total number of jobs[2]	Estimated number of jobs generated by the environment industry[3]
189	Other Motor Vehicle Parts Manufacturing	0.0000	25 217	0
190	Aerospace Product and Parts Manufacturing	0.0000	45 997	0
191	Railroad Rolling Stock Manufacturing	0.0000	10 314	0
192	Ship Building and Repairing	0.0000	4 908	0
193	Boat Building	0.0000	5 420	0
194	Other Transportation Equipment Manufacturing	0.0000	5 089	0
195	Wood Kitchen Cabinet and Counter Top Manufacturing	0.0000	14 789	0
196	Institutional Furniture Manufacturing	0.0000	8 076	0
197	Household Furniture Manufacturing	0.0000	29 929	0
198	Office Furniture (including Fixtures) Manufacturing	0.0000	28 691	0
199	Other Furniture Related Product Manufacturing	0.0000	6 294	0
200	Medical Equipment and Supplies Manufacturing	0.0034	17 175	59
201	Jewellery and Silverware Manufacturing	0.0000	5 263	0
202	Sporting and Athletic Goods Manufacturing	0.0000	10 375	0
203	Doll, Toy and Game Manufacturing	0.0000	4 126	0
204	Office Supplies (except Paper) Manufacturing	0.0000	1 486	0
205	Sign Manufacturing	0.0000	14 861	0
206	All Other Miscellaneous Manufacturing	0.0046	14 197	66
207	Wholesale Trade	0.0432	714 414	30 873
208	Retail Trade	0.0008	1 668 486	1 263
209	Air Transportation	0.0000	66 741	0
210	Rail Transportation	0.0000	46 500	1
211	Water Transportation	0.0000	12 772	0
212	Truck Transportation	0.0002	245 185	56
213	Urban Transit Systems	0.0000	28 936	0
214	Interurban and Rural Bus Transportation	0.0000	3 193	0
215	Taxi and Limousine Service	0.0000	31 910	0
216	All Other Transit and Ground Passenger Transportation	0.0000	52 681	0
217	Pipeline Transportation of Natural Gas	0.0000	7 012	0
218	Crude Oil and Other Pipeline Transportation	0.0000	1 737	0
219	Scenic and Sightseeing Transportation	0.0000	2 473	0
220	Support Activities for Transportation	0.0001	103 494	6
221	Postal Service	0.0000	83 793	0
222	Couriers and Messengers	0.0000	51 999	0
223	Farm Product Warehousing and Storage	0.0000	7 441	0
224	All Other Warehousing and Storage	0.0000	12 232	0
225	Newspaper, Periodical, Book and Database Publishers	0.0004	72 697	27
226	Software Publishers	0.0030	41 795	124
227	Motion Picture and Video Exhibition	0.0000	11 027	0
228	Motion Picture and Video Production, Distribution, Post-Production	0.0000	18 108	0
229	Sound Recording Industries	0.0000	5 383	0
230	Radio and Television Broadcasting	0.0000	19 969	0
231	Pay TV, Specialty TV and Program Distribution	0.0000	9 816	0
232	Telecommunications	0.0000	96 371	1
233	Information Services	0.0000	9 443	0
234	Data Processing Services	0.0048	9 417	45
235	Monetary Authorities	0.0000	1 780	0
236	Local Credit Unions	0.0000	94 174	0
237	Banking and Other Depository Credit Intermediation	0.0000	233 035	0
238	Insurance Carriers	0.0000	94 690	0
239	Lessors of Real Estate	0.0001	103 070	7
240	Owner-Occupied Dwellings	0.0000	0	0
241	Automotive Equipment Rental and Leasing	0.0000	18 286	0
242	Rental and leasing (except Automotive Equipment) and Lessors of Non-Fin.	0.0004	58 045	22
243	Non-Depository Credit Intermediation and Activities Related to Credit	0.0000	25 277	0
244	Agencies, Brokerages and Other Insurance Related Activities	0.0000	68 464	0
245	Securities, Commodity Contracts, Funds, and Other Financial Investment	0.0000	79 638	0
246	Offices of Real Estate Agents and Brokers and Activities Related	0.0000	89 004	0
247	Management of Companies and Enterprises	0.0000	95 700	0
248	Architectural, Engineering and Related Services	0.1515	176 318	26 717
249	Computer Systems Design and Related Services	0.0029	113 486	327
250	Advertising and Related Services	0.0001	46 784	6
251	Legal, Accounting, Tax Preparation, Bookkeeping and Payroll Services	0.0000	224 163	0

Table 12. Estimates of environmental employment using concordance list based on the Input-Output Classification (measure 4), by Input-Output industry, 1998 (continued)

Input-Output industry	Description	Ratio of environmental revenues to gross output[1]	Total number of jobs[2]	Estimated number of jobs generated by the environment industry[3]
252	Other Professional, Scientific and Technical Services	0.0003	204 705	55
253	Travel Arrangement and Reservation Services	0.0000	36 419	0
254	Investigation and Security Services	0.0000	62 783	0
255	Services to Buildings and Dwellings	0.0073	153 396	1 124
256	Other Administrative and Support Services	0.0006	246 899	137
257	Waste Management and Remediation Services	0.9991	19 796	24 111
258	Education and Educational Support Services (excluding non-profit)	0.0000	85 494	0
259	Offices of Physicians	0.0000	119 999	0
260	Offices of Dentists	0.0000	66 844	0
261	Miscellaneous Ambulatory Health Care Services	0.0047	86 009	405
262	Nursing and Residential Care Facilities	0.0000	68 745	0
263	Social Assistance	0.0000	157 937	0
264	Performing Arts, Spectator Sports and Related Industries	0.0000	103 630	0
265	Heritage Institutions (excluding Government Funded)	0.0000	6 556	0
266	Gambling Industries	0.0000	32 336	0
267	Amusement and Recreation Industries	0.0000	65 011	0
268	Traveller Accommodation	0.0000	116 145	0
269	RV (Recreational Vehicle) Parks, Recreational Camps, and Rooming	0.0000	59 321	0
270	Food Services and Drinking Places	0.0000	719 800	0
271	Automotive Repair and Maintenance	0.0000	122 446	0
272	Repair and Maintenance (except Automotive Repair and Maintenance)	0.0072	75 584	545
273	Funeral Services	0.0000	13 099	0
274	Dry Cleaning and Laundry Services	0.0000	39 647	0
275	Personal Care Services and Other Personal Services	0.0000	100 565	0
276	Grant-Making, Civic, and Professional and Similar Organizations	0.0000	70 746	0
277	Private Households	0.0000	99 784	0
278	Operating Supplies	0.0000	0	0
279	Office Supplies	0.0000	0	0
280	Cafeteria Supplies	0.0000	0	0
281	Laboratory Supplies	0.0000	0	0
282	Travel and Entertainment	0.0000	0	0
283	Advertising and Promotion	0.0000	0	0
284	Transportation Margins	0.0000	0	0
285	Religious Organizations	0.0000	75 578	0
286	Non-Profit Welfare Organizations	0.0000	66 253	0
287	Non-Profit Sports and Recreation Clubs	0.0000	19 046	0
288	Non-Profit Education Services	0.0000	30 329	0
289	Other Non-Profit Institutions Serving Households	0.0000	173 296	0
290	Hospitals	0.0000	512 869	0
291	Government Residential Care Facilities	0.0000	143 564	0
292	Universities	0.0000	176 762	0
293	Government Elementary and Secondary Schools	0.0000	586 154	0
294	Government Community Colleges and C.E.G.E.P.s	0.0000	100 204	0
295	Other Government Education Services	0.0000	12 394	0
297	Other Municipal Government Services	0.0000	401 653	0
298	Other Provincial and Territorial Government Services	0.0000	361 214	0
299	Other Federal Government Services including Defence services	0.0000	358 386	0
300	Other Aboriginal Government Services	0.0000	0	0

Notes:
The following are not covered in the Environment Industry: governments, colleges, universities, schools, non-profit organizations.
1. Environmental revenues from the Environment Industry Survey divided by gross output of the industry as a whole based on data produced by Input-Output Division, Statistics Canada. See Table 11 for details.
2. Data on total number of jobs are produced by Micro-Economic Analysis Division, Statistics Canada.
3. The ratio of environmental revenues to gross output is applied to the total number of jobs in order to estimate the number of jobs generated by the environment industry.
Source: Statistics Canada, Environment Accounts and Statistics Division.

Table 13. Estimates of environmental employment based on firm-level ratios (measure 2), by province and territory, 1998[1]

Province or territory	Total employment	Total revenues	Total environmental revenues	Ratio of environmental revenues to total revenues	Estimate of environmental employment[2]
	number	millions of dollars			number
Newfoundland and Labrador	2 354	202.0	114.7	0.66	1 559
Prince Edward Island	781	94.3	66.6	0.47	365
Nova Scotia	4 744	562.6	271.9	0.56	2 635
New Brunswick	3 719	640.8	264.7	0.61	2 266
Quebec	35 463	5 431.4	3 342.0	0.60	21 198
Ontario	63 961	10 881.5	5 962.6	0.53	33 593
Manitoba	3 255	459.3	298.1	0.60	1 954
Saskatchewan	3 606	329.7	221.0	0.64	2 325
Alberta	25 076	3 185.1	1 925.3	0.53	13 341
British Columbia	20 910	2 851.6	1 775.6	0.54	11 297
Yukon Territory, Northwest Territories and Nunavut	472	51.2	35.7	0.74	350
Canada	**164 341**	**24 689.4**	**14 278.3**	**0.58**	**90 883**

Notes:
Figures may not add up to totals due to rounding.
1. Data on total employment, total revenues and total environmental revenues were taken from Table A.1 of the report *Environment Industry Survey: Business Sector* (Catalogue no. 16F0008XIE).
2. The estimates are calculated at the firm level (ratio of environmental revenues to total revenues applied to total employment).
Source: Statistics Canada, Environment Accounts and Statistics Division.

Table 14. Estimates of environmental employment based on firm-level ratios (measure 2), by province and territory, 2000[1]

Province or territory	Total employment	Total revenues	Total environmental revenues	Ratio of environmental revenues to total revenues	Estimate of environmental employment[2]
	number	millions of dollars			number
Newfoundland and Labrador	1 938	170.6	101.6	0.67	1 289
Prince Edward Island	1 172	125.7	51.1	0.31	363
Nova Scotia	5 679	576.2	310.4	0.56	3 168
New Brunswick	3 729	408.6	243.4	0.62	2 301
Quebec	30 041	5 199.2	3 163.7	0.58	17 453
Ontario	64 483	12 783.8	6 165.1	0.54	34 612
Manitoba	3 352	690.3	518.0	0.66	2 221
Saskatchewan	3 668	350.2	203.1	0.66	2 407
Alberta	24 797	3 100.9	1 876.2	0.66	16 429
British Columbia	20 088	2 704.8	1 700.9	0.67	13 465
Yukon Territory, Northwest Territories and Nunavut	322	30.0	26.2	0.85	273
Canada	**159 269**	**26 140.3**	**14 359.7**	**0.59**	**93 981**

Notes:
Figures may not add up to totals due to rounding.
1. Data on total employment, total revenues and total environmental revenues were taken from Table A.1 of the report *Environment Industry Survey: Business Sector* (Catalogue no. 16F0008XIE).
2. The estimates are calculated at the firm level (ratio of environmental revenues to total revenues applied to total employment).
Source: Statistics Canada, Environment Accounts and Statistics Division.

Table 15. Estimates of environmental employment based on firm-level ratios (measure 2), by establishment size, Canada, 1998[1]

Establishment size[3]	Total employment	Total revenues	Total environmental revenues	Ratio of environmental revenues to total revenues	Estimate of environmental employment[2]
	number	millions of dollars			number
0 to 4	4 726	883.5	810.2	0.92	4 366
5 to 9	5 996	821.4	664.9	0.86	5 129
10 to 24	16 256	2 496.7	1 851.7	0.79	12 773
25 to 49	17 091	2 718.8	1 682.0	0.68	11 571
50 to 99	23 151	3 068.0	1 831.3	0.61	14 049
100 to 499	49 044	8 066.6	4 483.2	0.54	26 244
500 to 999	25 050	3 773.4	1 875.2	0.45	11 299
Greater than 999	23 027	2 861.1	1 079.8	0.24	5 452
All establishment sizes	**184 341**	**24 689.4**	**14 278.3**	**0.58**	**90 883**

Notes:
Figures may not add up to totals due to rounding.
1. Data on total employment, total revenues and total environmental revenues were taken from Table A.1 of the report *Environment Industry Survey: Business Sector* (Catalogue no. 16F0008XIE).
2. The estimates are calculated at the firm level (ratio of environmental revenues to total revenues applied to total employment).
3. Small establishments have fewer than 100 employees. Medium-sized establishments have 100 to 499 employees. Large establishments have 500 or more employees.
Source: Statistics Canada, Environment Accounts and Statistics Division.

Table 16. Estimates of environmental employment based on firm-level ratios (measure 2), by establishment size, Canada, 2000[1]

Establishment size[3]	Total employment	Total revenues	Total environmental revenues	Ratio of environmental revenues to total revenues	Estimate of environmental employment[2]
	number	millions of dollars			number
0 to 4	4 788	1 190.8	1 008.5	0.91	4 348
5 to 9	6 173	946.5	699.6	0.82	5 066
10 to 24	18 684	2 955.7	2 262.9	0.77	14 366
25 to 49	19 436	3 104.1	2 026.4	0.69	13 422
50 to 99	22 595	3 492.1	2 104.9	0.63	14 163
100 to 499	52 929	9 214.8	4 441.2	0.53	28 146
500 to 999	16 170	2 808.5	1 262.7	0.41	6 591
Greater than 999	18 494	2 427.8	553.6	0.43	7 879
All establishment sizes	**159 269**	**26 140.3**	**14 359.7**	**0.59**	**93 981**

Notes:
Figures may not add up to totals due to rounding.
1. Data on total employment, total revenues and total environmental revenues were taken from Table A.1 of the report *Environment Industry Survey: Business Sector* (Catalogue no. 16F0008XIE).
2. The estimates are calculated at the firm level (ratio of environmental revenues to total revenues applied to total employment).
3. Small establishments have fewer than 100 employees. Medium-sized establishments have 100 to 499 employees. Large establishments have 500 or more employees.
Source: Statistics Canada, Environment Accounts and Statistics Division.

Annex A : Questionnaires

ELECTRONIC PUBLICATIONS AVAILABLE AT
www.statcan.ca

Environment Accounts and Statistics Division

Environment Industry Survey, 1998

Confidential when completed

Collected under authority of Statistics Act, Revised Statutes of Canada, 1985, Chapter S19.

Français au verso

Correct as required

Company Name

Operating Name

C/O

Street Address

City

Province/Territory Postal Code

Please read before completing

SURVEY OBJECTIVE

This survey collects data on the revenues of environmental goods and services. These data will be aggregated with information from other sources to produce official estimates of national and provincial economic activity of the environment industry. Information from the survey can be used by businesses for market analysis, by trade associations to study the performance of the Environment Industry, by governments to develop national and regional policies, and by other users involved in research and policymaking.

The results of this survey will be published in the Statistics Canada publication, *Environment Industry 1998*, Catalogue No. 16F0008XPE.

CONFIDENTIALITY

Statistics Canada is prohibited by law from publishing any statistics which would divulge information obtained from this survey that relates to any identifiable respondent, without previously written consent. The data reported will be treated in strict confidence, used for statistical purposes only and published in aggregate form. The confidentiality provisions of the Statistics Act are not affected by either the Access to Information Act or any other legislation.

AUTHORITY

This survey is conducted under the authority of the Statistics Act, Revised Statutes of Canada, 1985, Chapter S19. **COMPLETION OF THIS QUESTIONNAIRE IS A LEGAL REQUIREMENT UNDER THE STATISTICS ACT.**

INFORMATION

If you require assistance in completing this questionnaire or if you have any questions or comments regarding this survey, please contact:

Operations and Integration Division
Statistics Canada
Ottawa, Ontario K1A 0T6

Telephone (toll-free): **1-800-387-0479 (within Canada)**
Fax: **1-800-755-5514 (within Canada)**
Email: **enviro.oid.ind@statcan.ca**

In all correspondence concerning this questionnaire, please quote the identification number that appears on the address label.

Please return this questionnaire within 30 days of receipt.

If you are unable to do so, kindly inform Operations and Integration Division of the expected completion date.

Important: Please read the **General Instructions** and **Definition** before answering.

Statistics Canada use only

Rec. D M Y	Ed. D M Y	Kyd. D M Y	Bat.	Coll.	FSC

4-2300-51: 1999-04-08 STC/NAD-291-75084

Statistics Canada Statistique Canada

Canada

General Instructions

1. Please complete and return this form in the envelope provided.
2. If your company is involved in a combination of environmental activities (producing environmental goods, providing environmental services or undertaking environment-related construction), please ensure that the relevant portion(s) of Section B are completed.
3. **Reasonably accurate estimates are acceptable.**
4. **Please report all amounts in CANADIAN DOLLARS.**

SECTION A - Company Information

A1. This questionnaire should be completed for your company's operation in one province/territory only. If you operate in more than one province/territory, you should file separate reports for the other provinces/territories in which you operate. You may wish to photocopy this questionnaire or you may call us toll-free at 1-800-387-0479 to request additional questionnaires.

Province/territory for which this report applies:

400

A2. Did your company operate in more than one province/territory in 1998?

401 ◯ Yes 402 ◯ No ➤ *Go to question A4.*

A3. Please indicate the other provinces/territories in which you operate.

403

A4. Reporting year:

Report must cover your most recent financial year ending between April 1, 1998 and March 31, 1999.

	Day	Month	Year		Day	Month	Year
From:	404	405	406	To:	407	408	409

Definition

What are Environmental Goods and Services?

Environmental goods and services are quite diverse in nature. These are goods and services that are used or can potentially be used to measure, prevent, limit, or correct environmental damage (both natural or by human activity) to water, air, soil as well as problems related to waste, noise and ecosystems. The markets for these goods and services are generally driven either by regulatory compliance or voluntary actions. In addition, environment-related construction projects are also included in this survey.

Also included are clean or resource-efficient ("eco-efficient") technologies that decrease material inputs, reduce energy consumption, recover valuable by-products, reduce emissions or minimise waste disposal problems.

Unlike traditional industries that produce more easily identifiable goods and services, the "ENVIRONMENT INDUSTRY" consists of various types of industries that provide environmental goods and services. For the purposes of this survey, all companies operating in Canada that are involved IN WHOLE or IN PART in the production of environmental goods, the provision of environmental services and the undertaking or environment-related construction activities make up what is called the "ENVIRONMENT INDUSTRY."

SECTION B - Revenues and Classification

Revenues

	Canadian Dollars (omit cents)
B1. What were your company's total revenues in 1998?	101
B2. Of your company's total revenues reported in B1, please indicate the revenues from the sale of environmental goods or services, or environment-related construction services.	102

Classification

The purpose of this section is to measure the revenues generated by your organisation by types of products or services provided. Please classify the environmental revenues reported in B2 according to the following goods/services category(ies). **Examples for each category are provided on the insert entitled "Classification Details" enclosed with this form.**

Environmental Goods

B3. Did your company ship environmental goods in 1998?

103 ◯ Yes 104 ◯ No ➤ *Go to question B7.*

B4. Please indicate your company's 1998 environmental revenues from the production of environmental goods, including installation, where applicable. If your company's shipments do not fall in any stated category, please use the *'Other, specify'* category.

	Canadian Dollars (omit cents)
1. Air Pollution Control (Indoor or Outdoor)	105
2. Water Supply and Conservation	106
3. Wastewater Management	107
4. Solid and Hazardous Waste Management	108
5. Remediation/Treatment of Soil and Groundwater	109
6. Noise/Vibration Abatement	110
7. Environmental Monitoring, Analysis and Assessment	111
8. Energy Efficient Products	112
9. Solar Energy Systems and Equipment	113
10. Biomass Energy Systems and Equipment	114
11. Other Renewable Energy Systems and Equipment	115
12. Alternative Fuel Systems	116
13. Clean Technologies, Eco-efficient Technologies and Related Components	117
14. Other, *specify* 120	118
Total Environmental Goods	119

B5. Is your company a reseller or distributor?

121 ◯ Yes 122 ◯ No ➤ *Go to question B7.*

	Percent (%)
B6. Of the total environmental goods reported in B4, what was the percentage of goods purchased for resale?	123

Environmental Services

B7. Did your company provide environmental services in 1998? (For additional information, please refer to the insert entitled "Classification Details.")

124 ◯ Yes

125 ◯ No ➤ *Go to question B9.*

B8. Please indicate your company's 1998 environmental revenues from environmental services, where applicable. If your company's activities do not fall in any stated category, please use the *'Other, specify'* category.

	Canadian Dollars (omit cents)
15. Air Pollution Control (Indoor or Outdoor)	126
16. Water Supply and Conservation	127
17. Wastewater Management	128
18. Solid and Hazardous Waste Management	129
19. Remediation/Treatment of Soil and Groundwater	130
20. Noise/Vibration Abatement	131
21. Environmental Research and Development	132
22. Energy Efficiency and Renewable Energy	133
23. Environmental Education, Training, and Information	134
24. Other Environmental Consulting Engineering Services	135
25. Other Analytical Services, Data Collection and Analysis	136
26. Other, *specify* 139	137
Total Environmental Services	138

Environment-related Construction Services

B9. Did your company provide environment-related construction services in 1998? (For additional information, please refer to the insert entitled "Classification Details.")

140 ◯ Yes

141 ◯ No ➤ *Go to question C1*

B10. Please indicate your company's 1998 environmental revenues from environment-related construction services, including repair and maintenance. If your company's activities do not fall in any stated category, please use the *'Other, specify'* category.

	Canadian Dollars (omit cents)
27. Air Pollution Control (Indoor or Outdoor)	142
28. Water Supply and Conservation	143
29. Wastewater Management	144
30. Solid and Hazardous Waste Management	145
31. Remediation/Treatment of Soil and Groundwater	146
32. Noise/Vibration Abatement	147
33. Other, *specify* 150	148
Total Environment-related Construction Services	149

SECTION C - Client Base

C1. Please estimate your company's environmental revenues reported in B2 according to the following client base breakdown.

	Canadian Dollars (omit cents)
Municipal Government	151
Federal/Provincial Governments	152
Agriculture and Agri-Food Products	153
Forestry and Pulp and Paper	154
Fish and Fish Products (Including Aquaculture)	155
Mining and Related Products, Metal and Mineral Products	156
Crude Petroleum and Natural Gas, Refined Petroleum and Related Products	157
Manufacturing	158
Business Services	159
Gas Distribution and Electric Power Systems	160
Individuals and Households	161
Other, *specify* 164	162
Total Environmental Revenues (must equal value reported in B2)	163

SECTION D - Client Location

D1. Please estimate your company's environmental revenues reported in B2 according to the following client location breakdown.

	Canadian Dollars (omit cents)
Newfoundland	165
Prince Edward Island	166
Nova Scotia	167
New Brunswick	168
Quebec	169
Ontario	170
Manitoba	171
Saskatchewan	172
Alberta	173
British Columbia	174
Yukon Territory, Northwest Territories, and Nunavut Territories	175
Outside Canada (foreign exports)	176
Total Environmental Revenues (must equal value reported in B2)	177

SECTION E - Environmental Export Revenues

E1. Please provide a breakdown of the environmental revenues from OUTSIDE CANADA (foreign exports) reported in D1, by region.

Exports to the United States: *Please refer to the insert entitled "Classification Details" for a list of states in each region of the United States.*

		Canadian Dollars (omit cents)
1. Northeast	178	
2. Midwest	179	
3. South	180	
4. West	181	
E1.1 Environmental Exports to the United States (sum of items 1 to 4)	182	

Exports to the Rest of the World:

	Canadian Dollars (omit cents)
5. Mexico	183
6. Other Central America	184
7. South America	185
8. Europe	186
9. Middle East	187
10. Africa	188
11. China	189
12. Japan	190
13. Other Asia	191
14. Australia	192
15. Other foreign (*specify*) 196	193
E1.2 Environmental Exports to the Rest of the World (sum of items 5 to 15)	194

Total Environmental Exports (sum of E1.1 and E1.2)	195

SECTION F - Anticipated Revenues

	Canadian Dollars (omit cents)
F1. What are your anticipated environmental revenues for the year 2000?	197
F2. Of the environmental revenues reported in F1, how much will be generated outside of Canada?	198

SECTION G - Wages and Salaries

G1. Please estimate your company's total expenses on wages, salaries and employee benefits in 1998.

	Canadian Dollars (omit cents)
Wages and salaries	199
Employee benefits (including training and education)	200
Total Expenses on Wages, Salaries and Employee Benefits	201

SECTION H - Employment

H1. Please report the total number of persons usually employed during the reporting period.

	Number
Working proprietors and/or principals of unincorporated businesses	202
Full-time Employees - Regular employees who worked the standard work week as observed by the business	203
Part-time Employees - Those who worked regularly but for fewer than the standard work week hours observed by the business	204
Contract employees - Those who were engaged only for the duration of a specific project or term	205
Total Employment	206

H2. Of the total employment reported in H1, please **estimate** the number of employees who spent time in the production/provision of environmental goods and services, or environment-related construction services EXCLUDING CONTRACT EMPLOYEES.

	Number
Total Environmental Employees	207

SECTION I - Certification and Comments

Certification

I certify that to the best of my knowledge, the information provided in this questionnaire is correct and complete.

Signature	Date Day Month Year
Name of person completing this questionnaire (type or print)	Telephone
Title	Fax
Year Company Established / Ownership Content: Canadian Ownership _____ %	Email Address

Comments

If you have any questions, please contact us.
Telephone (toll free) 1-800-387-0479 (within Canada)
Fax: 1-800-755-5514 (within Canada)
Email: enviro.oid.ind@statcan.ca

Please return this questionnaire in the envelope provided

Thank you for your cooperation !

Environment Accounts and Statistics Division

Environment Industry Survey, 2000

Confidential when completed

Collected under authority of Statistics Act, Revised Statutes of Canada, 1985, Chapter S19.

Français au verso

Correct as required

Company Name

Establishment Name

C/O

Street Address

City

Province/Territory Postal Code

Please read before completing

SURVEY OBJECTIVE

This survey collects data on the revenues of environmental goods and services. These data will be aggregated with information from other sources to produce official estimates of national and provincial economic activity of the environment industry. Information from the survey can be used by businesses for market analysis, by trade associations to study the performance of the Environment Industry, by governments to develop national and regional policies, and by other users involved in research and policymaking.

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Statistics Canada is prohibited by law from publishing any statistics which would divulge information obtained from this survey that relates to any identifiable respondent, without previously written consent. The data reported will be treated in strict confidence, used for statistical purposes only and published in aggregate form. The confidentiality provisions of the Statistics Act are not affected by either the Access to Information Act or any other legislation.

AUTHORITY

This survey is conducted under the authority of the Statistics Act, Revised Statutes of Canada, 1985, Chapter S19. **COMPLETION OF THIS QUESTIONNAIRE IS A LEGAL REQUIREMENT UNDER THE STATISTICS ACT.**

INFORMATION

If you require assistance in completing this questionnaire or if you have any questions or comments regarding this survey, please contact:

Operations and Integration Division
Statistics Canada
Ottawa, Ontario K1A 0T6

Telephone (toll-free): **1-800-387-0479 (within Canada)**
Fax: **1-800-755-5514 (within Canada)**
Email: **enviro.oid.ind@statcan.ca**

In all correspondence concerning this questionnaire, please quote the identification number that appears on the address label.

Please return this questionnaire within 30 days of receipt.

If you are unable to do so, kindly inform Operations and Integration Division of the expected completion date.

Important: Please read the General Instructions before answering.

Statistics Canada use only

Rec. D M Y	Ed. D M Y	Kyd. D M Y	Bat.	Coll.	FSC

4-2300-51: 2001-03-09 STC/NAD-291-75084

Statistics Canada Statistique Canada

Canada

General Instructions

1. Please complete and return this form in the envelope provided.
2. Please refer to the accompanying ***Guide on Definitions and Classification Details*** for more information.
3. If this establishment is involved in a combination of environmental activities *(producing environmental goods, providing environmental services or undertaking environment-related construction)*, please ensure that the relevant portion(s) of Section B are completed.
4. When precise figures are not available, please provide your best estimates.
5. Please report all dollar amounts in **CANADIAN DOLLARS.**

SECTION A - Information on this establishment

A1. This questionnaire should be completed for your company's establishment in one province or territory that produces environmental goods or offers environmental services or environment-related construction. If you operate more than one establishment that produces environmental goods or offers environmental services or environment-related construction you should fill out separate questionnaires for each of these establishments in each province or territory. You may wish to photocopy this questionnaire or you may call us toll-free at 1-800-387-0479 to request additional questionnaires.

Province/territory for which this questionnaire applies:

400

A2. Did your company operate environmental establishments in more than one province or territory in 2000?
Environmental establishments refer to those establishments that produced environmental goods or offered environmental services or environment-related construction.

401 ◯ Yes 402 ◯ No ➤ *Go to question A4.*

A3. Please indicate where you operated other environmental establishments in this province or territory or elsewhere in Canada in 2000.

Establishment Name	Address	Phone Number	Contact
40101	40102	40103	40104
40105	40106	40107	40108
40109	40110	40111	40112
40113	40114	40115	40116

A4. Reporting year:

1. The report must cover your most recent financial year ending between April 1, 2000 and March 31, 2001.

From:		
Day	Month	Year
403	404	405

To:		
Day	Month	Year
406	407	408

2. Did your company operate this establishment for the full year?

409 ◯ Yes ➤ *Please go to Question B1, Section B - Revenues and Classifications*

410 ◯ No ➤ *Please check the appropriate box(es) below*

411 ◯ Seasonal operation ➤

From:		
Day	Month	Year
412		

To:		
Day	Month	Year
413		
415		
417		
419		
421		
423		

414 ◯ New business *(please provide date of start)* _____

416 ◯ Change of fiscal year end *(please provide the new end date)* _____

418 ◯ Change of ownership *(please provide the date)* _____

420 ◯ Ceased operations *(please provide the date)* _____

422 ◯ Temporarily closed *(please specify the closing date and reason for closing)* _____

424

425 ◯ Other *(please specify)* ➤ 426

SECTION B - Revenues and Classification

Revenues

	Canadian Dollars (omit cents)
B1. What were this establishment's total revenues in 2000?	101
B2. Of this establishment's total revenues reported in Question B1, please report the revenues from the sale of environmental goods or services, or revenues from environment-related construction.	102

Classification

The purpose of this section is to measure the environmental revenues received by this establishment by types of environmental goods, services and environment-related construction provided. Please classify the environmental revenues reported in Question B2 according to the applicable categories of environmental goods, environmental services and environment-related construction. Examples for each category are provided on the insert entitled ***Guide on Definitions and Classification Details*** enclosed with this form.

Environmental Goods

B3. Did this establishment receive revenues from the sale of environmental goods in 2000?

103 ◯ Yes ➤ *Go to question B4.* 104 ◯ No ➤ *Go to question B5.*

B4. Please report this establishment's 2000 revenues received from the sale of environmental goods. If this establishment's environmental goods do not fall in any stated category, please use the "Other, specify" category. *Please refer to the **Guide on Definitions and Classification Details** for examples of each category.*

	Canadian Dollars (omit cents)
1. Air Pollution Control Systems and Equipment (Indoor or Outdoor)	105
2. Water Supply and Conservation Systems and Equipment	106
3. Wastewater Management and Sewage Treatment Systems and Equipment	107
4. Hazardous and Non-Hazardous Waste Management Equipment	108
5. Systems and Equipment for Remediation/Treatment of Soil, Surface Water, Seawater and Groundwater	109
6. Noise/Vibration Abatement Equipment	110
7. Environmental Monitoring, Analysis and Assessment	111
8. Energy Efficient Equipment	112
9. Solar Energy Systems and Equipment	113
10. Biomass Energy Systems and Equipment	114
11. Wind Energy Systems and Equipment	115
12. Other Renewable Energy Systems and Equipment	116
13. Alternative Fuel Systems	117
14. Clean Technologies and Related Components	118
15. Other, *specify* 121	119
Total Environmental Goods	120

Environmental Services

B5. Did this establishment receive revenues from the provision of environmental services in 2000?

122 ◯ Yes ➤ *Go to question B6.* 123 ◯ No ➤ *Go to question B7.*

B6. Please report this establishment's 2000 revenues received from the provision of environmental services. If this establishment's environmental services do not fall in any stated category, please use the "Other, specify" category. *Please refer to the* ***Guide on Definitions and Classification Details*** *for examples of each category.*

	Canadian Dollars (omit cents)
16. Air Pollution Control Services (Indoor or Outdoor)	124
17. Water Supply and Conservation Services	125
18. Wastewater Management and Sewage Treatment Services	126
19. Hazardous and Non-Hazardous Waste Management Services	127
20. Services for Remediation/Treatment of Soil, Surface Water, Seawater and Groundwater	128
21. Noise/Vibration Abatement Services	129
22. Environmental Research and Development Services	130
23. Energy Efficiency and Renewable Energy Services	131
24. Environmental Education, Training and Information	132
25. Management Consulting and Legal Services	133
26. Other Environmental Consulting Engineering Services	134
27. Other Analytical Services, Data Collection and Analysis	135
28. Other, *specify* 138	136
Total Environmental Services	137

Environment-related construction

B7. Did this establishment receive revenues from environment-related construction projects in 2000?

139 ◯ Yes ➤ *Go to question B8.* 140 ◯ No ➤ *Go to question C1, Section C - Client Base.*

B8. Please report this establishment's 2000 revenues received from environment-related construction projects. If this establishment's environment-related construction projects do not fall in any stated category, please use the "Other, specify" category. *Please refer to the* ***Guide on Definitions and Classification Details*** *for examples of each category.*

	Canadian Dollars (omit cents)
29. Air Pollution Control (Indoor or Outdoor)	141
30. Water Supply and Conservation	142
31. Wastewater Management and Sewage Treatment	143
32. Hazardous and Non-Hazardous Waste Management	144
33. Remediation/Treatment of Soil, Surface Water, Seawater ad Groundwater	145
34. Noise/Vibration Abatement	146
35. Other, *specify* 149	147
Total Environment-related Construction	148

SECTION C - Client Base

C1. Please report this establishment's environmental revenues reported in Question B2 according to the type of client to whom the environmental goods or services were delivered or for whom the environment-related construction projects were completed.

		Canadian Dollars (omit cents)
Municipal Government	150	
Federal/Provincial Governments	151	
Agriculture and Agri-Food Products	152	
Forestry and Pulp and Paper	153	
Fish and Fish Products *(Including Aquaculture)*	154	
Mining and Related Products, Metal and Mineral Products	155	
Crude Petroleum and Natural Gas, Refined Petroleum and Related Products	156	
All other Manufacturing	157	
Business Services	158	
Gas Distribution and Electric Power Systems	159	
Individuals and Households	160	
Other, *specify* 163	161	
Total Environmental Revenues ***(must equal the value reported in Question B2)***	162	

SECTION D - Client Location

D1. Please report this establishment's environmental revenues reported in Question B2 according to the location of the client to whom the environmental goods or services were delivered or for whom the environment-related construction projects were completed.

		Canadian Dollars (omit cents)
Newfoundland	164	
Prince Edward Island	165	
Nova Scotia	166	
New Brunswick	167	
Quebec	168	
Ontario	169	
Manitoba	170	
Saskatchewan	171	
Alberta	172	
British Columbia	173	
Yukon Territory, Northwest Territories, and Nunavut	174	
Outside Canada (Exports)	175	
Total Environmental Revenues ***(must equal the value reported in Question B2)***	176	

SECTION E - Environmental Export Revenues

E1. Please report a breakdown, by region, of this establishment's environmental revenues from OUTSIDE CANADA *(exports)* reported in Question D1.

	Canadian Dollars (omit cents)
United States	177
Mexico	178
Other Central America	179
South America	180
Europe	181
Middle East	182
Africa	183
China	184
Japan	185
Other Asia	186
Australia	187
Other foreign (*specify*) 190	188
Total Environmental Exports	189

SECTION F - Environment-related Activities

F1. Please report the **year** when this establishment started selling the environmental goods, offering the environmental service or undertaking the environment-related construction reported in Question B2. 191

SECTION G - Total Employment

G1. Please report the total number of persons usually employed by this establishment during the reporting period.

Working proprietors and/or principals of unincorporated businesses	192
Full-time employees - regular employees who worked the standard work week hours observed by the establishment	193
Part-time employees - those who worked regularly but for fewer than the standard work week hours observed by the establishment	194
Contract employees - those who were engaged only for the duration of a specific project or term	195
Total Employment	196

SECTION H - Certification and Comments

Certification

H1. I certify that to the best of my knowledge, the information provided in this questionnaire is correct and complete

Signature	Date (Day / Month / Year)
Name of person completing this questionnaire (type or print)	Telephone
Title	Fax
Year this establishment started operations	Email Address

H2. Approximately how long did it take you and other employees in your company to collect the data and complete the survey? ➤ [427] Hours

Comments

We invite your comments or suggestions on the following or any other topics related to the Environment Industry Survey. We appreciate your assistance.

- *Questionnaire content*
- *New questions of interest to your industry*
- *Clarity of questions and provision of sufficient examples*
- *Order and flow of questions*
- *Timing of receipt of questionnaire and the period given for response*
- *Alternative sources of information to further reduce response burden*
- *Potential for electronic data reporting*

If you have any questions, please contact us.
Telephone (toll free) 1-800-387-0479 (within Canada)
Fax: 1-800-755-5514 (within Canada)
Email: enviro.oid.ind@statcan.ca

Please return this questionnaire in the envelope provided

Thank you for your cooperation !